User Manual
Manuel de l'utilisateur
Guía del usuario

MAGNAVOX

42MD459B
LCD TV/BD/DVD

English
Français
Español

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Full HD 1080p
HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE
Blu-ray Disc™
BONUS VIEW™
HDTV HIGH-DEFINITION TELEVISION
DOLBY DIGITAL
dts 2.0+Digital Out
Java POWERED

MODEL NUMBER | SERIAL NUMBER

ENERGY STAR

Return your Product Registration Card or register online at
www.magnavox.com/support today to get the very most from your purchase.

Registering your model with MAGNAVOX makes you eligible for all of the valuable benefits listed below, so don't miss out. Complete and return your Product Registration Card at once, ***or register online at www.magnavox.com/support*** *to ensure:*

***Proof of Purchase**
Returning the enclosed card guarantees that your date of purchase will be on file, so no additional paperwork will be required from you to obtain warranty service.

***Product Safety Notification**
By registering your product, you'll receive notification directly from the manufacturer - in the rare case of a product recall or safety defect.

***Additional Benefits**
Registering your product guarantees that you'll receive all of the privileges to which you're entitled, including special money-saving offers.

MAGNAVOX

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Thank you for your confidence in MAGNAVOX. You've selected one of the best-built, best-backed products available today. We'll do everything in our power to keep you happy with your purchase for many years to come.

As a member of the MAGNAVOX "family," you're entitled to protection by one of the most comprehensive warranties and outstanding service networks in the industry. What's more, your purchase guarantees you'll receive all the information and special offers for which you qualify, plus easy access to accessories from our convenient home shopping network.

Most importantly, you can count on our uncompromising commitment to your total satisfaction.

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Know these **safety** symbols



This "bolt of lightning" indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your household, please do not remove product covering.

The "exclamation point" calls attention to features for which you should read the enclosed literature closely to prevent operating and maintenance problems.

WARNING : To reduce the risk of fire or electric shock, this apparatus should not be exposed to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.

CAUTION : To prevent electric shock, match wide blade of plug to wide slot, fully insert.
ATTENTION : Pour éviter les choc électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

For Customer Use
Enter below the Serial No. which is located on the rear of the cabinet. Retain this information for future reference.
Model No._____
Serial No. _____

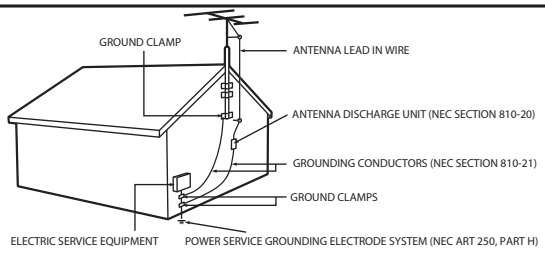
IMPORTANT SAFETY INSTRUCTIONS

Read before operating equipment

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings.
 Install in accordance with the manufacturers instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and third grounding prong. The wide blade or third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12.  Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. **Damage Requiring Service** - The appliance should be serviced by qualified service personnel when:
 A. The power supply cord or the plug has been damaged;
 B. Objects have fallen, or liquid has been spilled into the appliance;
 C. The appliance has been exposed to rain
 D. The appliance does not appear to operate normally or exhibits a marked change in performance;
 E. The appliance has been dropped, or the enclosure damaged.
16. **Tilt/Stability** - All televisions must comply with recommended international global safety standards for tilt and stability properties of its cabinet design.
 • Do not compromise these design standards by applying excessive pull force to the front, or top, of the cabinet which could ultimately overturn the product.
 • Also, do not endanger yourself, or children, by placing electronic equipment/toys on the top of the cabinet. Such items could unsuspectingly fall from the top of the set and cause product damage and/or personal injury.
17. **Wall or Ceiling Mounting** - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
18. **Power Lines** - An outdoor antenna should be located away from power lines.
19. **Outdoor Antenna Grounding** - If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.
 Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure below.
20. **Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
21. **Battery Usage CAUTION** - To prevent battery leakage that may result in bodily injury, property damage, or damage to the unit:
 • Install all batteries correctly, with + and - aligned as marked on the unit.
 • Do not mix batteries (old and new or carbon and alkaline, etc.).
 • Remove batteries when the unit is not used for a long time.

Note to the CATV system installer : This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Example of Antenna Grounding as per NEC - National Electric Code



☑ Precaution

Do not place the unit on the furniture that is capable of being tilted by a child and an adult leaning, pulling, standing or climbing on it. A falling unit can cause serious injury or even death.

FCC WARNING
This apparatus may generate or use radio frequency energy. Changes or modifications to this apparatus may cause harmful interference unless the modifications are expressly approved in the manual. The user could lose the authority to operate this apparatus if an unauthorized change or modification is made.

RADIO-TV INTERFERENCE
This apparatus has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This apparatus generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this apparatus does cause harmful interference to radio or television reception, which can be determined by turning the apparatus off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1) Reorient or relocate the receiving antenna.
2) Increase the separation between the apparatus and receiver.
3) Connect the apparatus into an outlet on a circuit different from that to which the receiver is connected.
4) Consult the dealer or an experienced radio/TV technician for help.

DECLARATION OF CONFORMITY

Trade Name: MAGNAVOX
Model: 42MD459B
Responsible Party: FUNAI CORPORATION, INC.
Address: 201 Route 17 North Suite No. 903 Rutherford, New Jersey 07070 U.S.A.
Telephone Number: 201-727-4560

This Class B digital apparatus complies with Canadian ICES-003.

This apparatus should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided. Make sure to leave a space of 4 inches (10cm) or more around this apparatus.

Disconnect the mains plug to shut off when find trouble or not in use. The mains plug shall remain readily operable.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
WARNING: Batteries (battery pack or battery installed) shall not be exposed to excessive heat such as sunshine, fire or the like.



Like all LCD products, this set contains a lamp with Mercury, please dispose of according to all Local, State and Federal laws. For the disposal or recycling information, contact: www.mygreenelectronics.com or www.eiae.org

WARNING: To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the instructions.

LASER SAFETY
This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
CAUTION: Visible and invisible laser radiation when open and interlock defeated. Do not stare into beam.
LOCATION: Inside, near the deck mechanism.

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Unauthorized copying, broadcasting, public performance and lending of discs are prohibited. This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

TO AVOID THE HAZARDS OF ELECTRICAL SHOCK AND FIRE
- Do not handle the AC power cord with wet hands.
- Do not remove this unit's cabinet. Touching parts inside the cabinet could result in electric shock and/or damage to this unit. For service and adjustment inside the cabinet, call a qualified dealer or an authorized service center.
- Do not pull on the AC power cord when disconnecting it from an AC outlet. Grasp it by the plug.
- Do not put your fingers or objects into the unit.

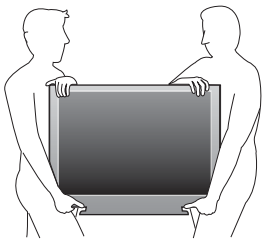
LOCATION AND HANDLING
- The openings should not be blocked by placing the unit on a bed, sofa, carpet, rug, or other similar surface.
- Do not install the unit near or over a radiator or heat register.
- Do not install the unit in direct sunlight, near strong magnetic fields, or in a place subject to dust or strong vibration.
- Avoid a place with drastic temperature changes.
- Install the unit in a horizontal and stable position. Do not place anything directly on top or bottom of the unit. Depending on your external devices, noise or disturbance of the picture and/or sound may be generated if the unit is placed too close to them. In this case, please ensure enough space between the external devices and the unit.
- Depending on the environment, the temperature of this unit may increase slightly. This is not a malfunction.

DEW CONDENSATION WARNING
- Dew condensation may form inside the unit in the following conditions. If so, do not use this unit at least for a few hours until its inside gets dry.
 - The unit is moved from a cold place to a warm place.
 - Under conditions of high humidity.
 - After heating a cold room.

NOTE ABOUT RECYCLING
- This unit's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with your local recycling regulations.
- Batteries should never be thrown away or incinerated but disposed of in accordance with your local regulations concerning chemical wastes.



WHEN CARRYING THIS UNIT
- At least two people are required when carrying this unit.
- Make sure to hold the upper and bottom frames of the TV firmly as illustrated.



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- Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
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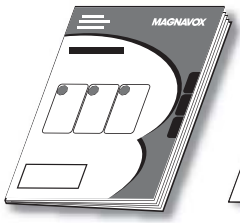
☑ Symbols Used in this Manual

The following is the description for the symbols used in this manual. Description refers to:

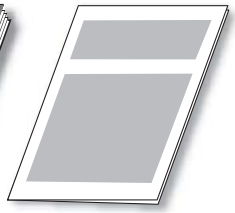
TV FUNCTIONS	BLU-RAY FUNCTIONS
TV : Analog TV operation DTV : Digital TV operation • If neither symbol appears under the function heading, operation is applicable to both.	BD : Playback of BD-video DVD : Playback of DVD-video CD : Playback of audio CD • If none of symbol appears under the function heading, operation is applicable to all.

☑ Supplied Accessories

user manual (1EMN24659)



quick start guide (1EMN24663)



main remote control (NF034UD)



batteries (AA x 2)



simple remote control (NH100UD)



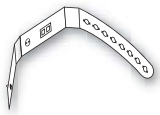
batteries (AAA x 2)



registration card (1EMN24699)



cable management tie (1EM428657)



screw kit for attaching the stand (1ESA20607)



AC power cord (WAV0162LW001) or (WAV0162LTE03)

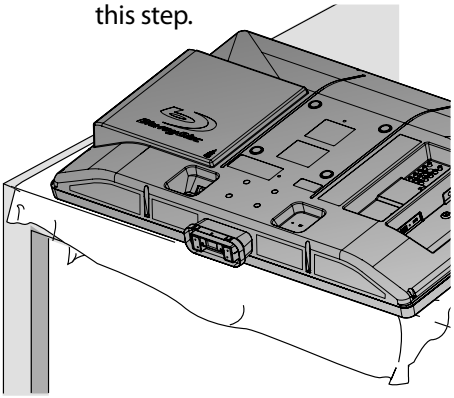


- If you need to replace these accessories, please refer to the part No. with the illustrations and call our toll free customer support line found on the cover of this manual.

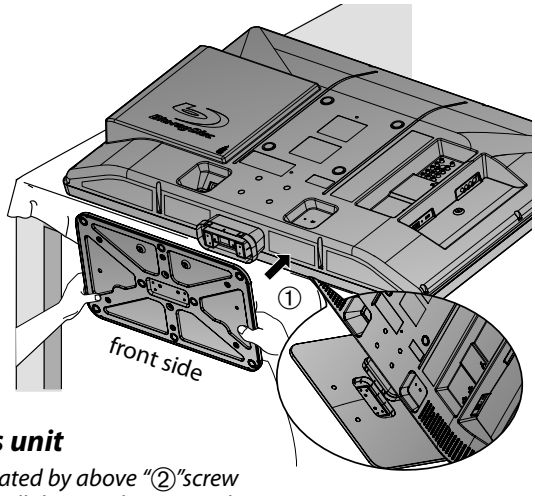
☑ Attaching the Stand

You must attach the stand to the unit to have it as a table top unit. Be sure the front and rear of the stand match the proper direction.

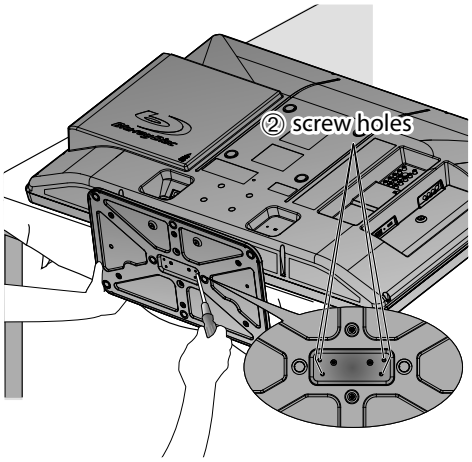
1 Spread a thick and soft cloth over a table as shown below.
Place the main unit face down onto it.
Make sure not to damage the screen.
At least two people are required at this step.



2 Insert the neck under the bottom of the main unit to the stand's hole (shown by arrow ①).



3 Drive Phillips pan screws in the 4 threaded holes at the bottom of the stand until they are tight.



To remove the stand from this unit

Unscrew the Phillips pan screws indicated by above "②"screw holes. After the screws are removed pull the stand up toward the rear of the unit. Be careful not to drop the stand when you remove it.

Note:

- *When attaching the stand, ensure that all screws are tightly fastened. If the stand is not properly attached, it could cause the unit to fall, resulting in injuries as well as damage to the unit.*
- *Make sure to use a table which can support the weight of this unit and is larger than this unit.*
- *Make sure the table is in a stable location.*

☑ Features

TV

- **DTV/TV/CATV**
 - You can use your remote control to select channels which are broadcast in digital format and conventional analog format. Also, cable subscribers can access their cable TV channels.
- **Information Display (DTV only)**
 - You can display the title, contents and other information of the current DTV program on the TV screen.
- **Autoprogram**
 - This unit automatically scans and memorizes channels available in your area, eliminating difficult setup procedures.
- **Child Lock**
 - This feature allows you to block children's access to inappropriate programs.
- **Closed Caption Decoder**
 - Built-in closed caption decoder displays text for closed caption supported programs.
- **MTS/SAP Tuner**
 - Audio can be selected from the remote control.
- **Auto Shut Off Function**
 - If there is no signal input from the antenna terminal and no operation for 15 minutes, the unit will turn off automatically.
- **Sleep Timer**
 - This feature will automatically turn off the power of the unit at a specific time.
- **Choices for On-screen Language**
 - Select your on-screen language: English, Spanish or French.
- **Stereo Sound Function**
- **PLL Frequency Synthesized Tuning**
 - Provides free and easy channel selection and lets you tune directly to any channel using the number buttons on the remote control.
- **Various Adjustment for Picture and Sound**
 - Customizes image quality to suitable for your room and sets the sound as your preference.
- **HDMI Input**
 - When using HDMI1 Input, you can enjoy this unit as a PC monitor if your PC has DVI output terminal.
- **Component Video Input**
- **S-Video Input**
- **AV Input**
- **USB Terminal**
 - The JPEG or the MP3 files stored in a USB flash memory can be played back on this unit.
- **Digital Audio Output**
- **Analog Audio Output**

BD/DVD

- **Dolby Digital Sound**
 - Enjoy Dolby Digital multi-channel surround sound when you connect the unit to your Dolby Digital decoder.
- **DTS**
 - You can enjoy movie dynamic and realistic sound like movie theater when you connect the unit to your DTS decoder.
- **Still / Fast / Slow / Step Playback**
 - Various playback modes are available including still pictures, fast forward/reverse, slow motion and step frames.
- **BD/DVD Menus in a Desired Language**
 - You can display BD/DVD menus in a desired language, if available on a BD-video or a DVD-video.
- **Auto Power Off**
 - If there is no operation for 20 minutes, the unit will turn itself off automatically.
- **Parental Lock**
 - Block the viewing of a BD-video or a DVD-video unsuitable for children.
- **Resume Playback**
 - Lets you resume playback from the point at which playback was stopped.
- **Bit Rate Indication**
- **DRC (dynamic range control)**
 - You can control the range of sound volume.
- **Selecting a Camera Angle**
 - You can select the desired camera angle, if a BD/DVD contains sequences recorded from different angles.
- **Virtual Surround**
- **Search**
 - chapter search / title search / track search / time search
- **Marker**
 - The part on the disc designated by user can be called back.
- **Repeat**
 - chapter / title / track / all / A-B
- **Program Playback for audio CD**
 - You can program the order of tracks to play them back in designated order.
- **Random Playback for audio CD**
 - This unit can shuffle the order of tracks to play them back in randomly.

Accessing from **[SAP]** button

During playback

- **Choices for Audio Language and Stereo Sound Function**
 - Select your desired languages or stereo sound function when different options are available on your disc.

Accessing from **[SUBTITLE]** button

During playback

- **Subtitles in a Desired Language**
 - You can select a desired language for displaying subtitle, if that language is available on a a BD-video or a DVD-video.

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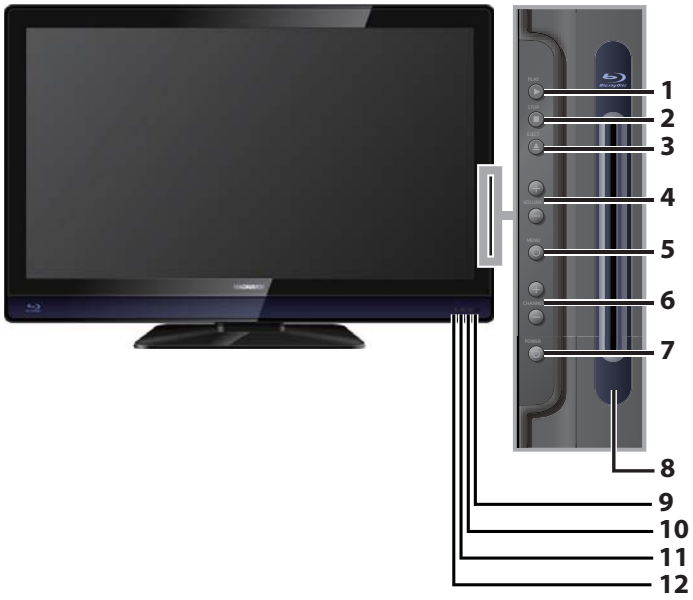
To get the latest software information of this unit, please visit the following our website;
http:// www.magnavox.com/support/updates

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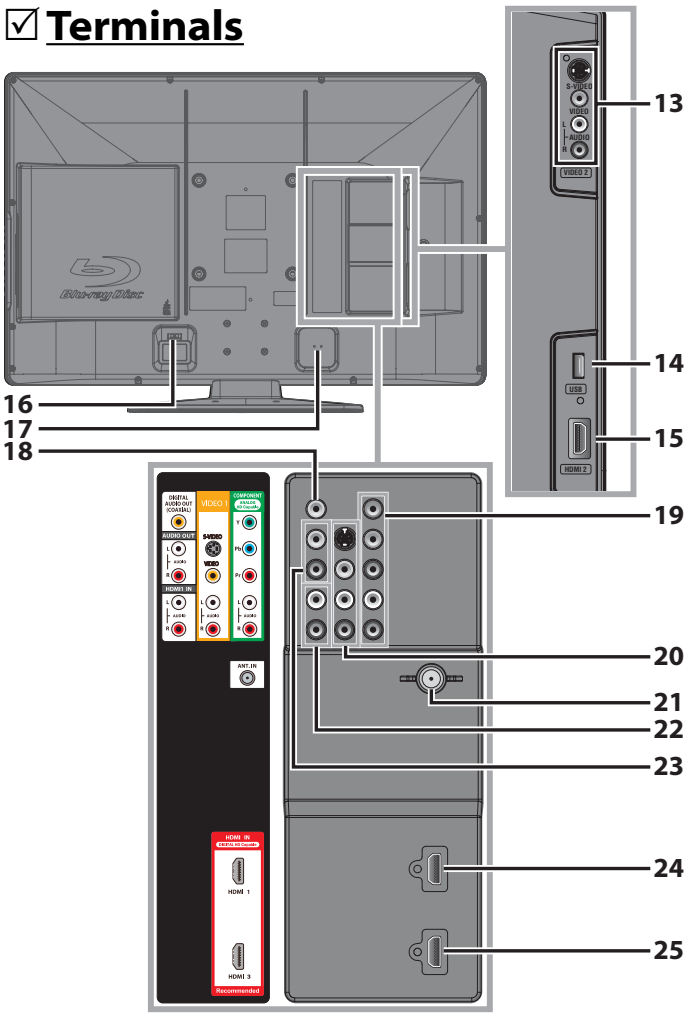
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☑ Control Panel



1. ▶ (play) (p. 39)
 Press to begin the disc playback.
2. ■ (stop) (p. 39)
 Press to stop the disc playback.
3. ▲ (eject) (p. 39)
 Press to eject the disc.
4. **VOLUME + / –** (p. 18)
 Press to adjust the volume or move right (+) / left (–) through the main menu items.
5. **MENU** ○ (p. 22)
 Press to display the main menu.
6. **CHANNEL + / –** (p. 18 / p. 19)
 Press to select channels or move up (+) / down (–) through the main menu items.
7. **POWER** ⏻ (p. 17)
 Press to turn the unit on and off.
8. **Disc loading Slot** (p. 39)
 Insert the disc with the label side facing forward.
9. **Infrared sensor Window**
 Receives infrared rays transmitted from the remote control.
10. **POWER Indicator**
 Lights up green when power is on.
11. **STAND BY Indicator**
 Lights up red when power is off.
12. **DISC Indicator**
 Lights up orange when the disc is inserted.

☑ Terminals



[Side Panel]

13. **S-Video / Video / Audio Input jack for VIDEO 2** (p. 14)
 S-Video, RCA video, RCA audio cable connection from an external device.
14. **USB terminal** (p. 16)
 Use this terminal only to play back MP3 / JPEG files stored in the USB flash memory, or when software update is needed.
15. **HDMI 2 Input jack** (p. 12 / p. 13)
 HDMI connection from HDMI device.

[Rear Panel]

16. **AC power Inlet** (p. 16)
 Connect the supplied AC power cord for a standard AC outlet.
17. **Cable management** (p. 16)
 Attach the supplied holder here to bundle the cables.
18. **Digital Audio Output jack** (p. 14)
 Coaxial digital cable connection for a decoder or an audio receiver.
19. **Component Video and Audio Input jack** (p. 12 / p. 14)
 RCA component video cable and RCA audio cable connection from an external device.
20. **S-Video / Video / Audio Input jack for VIDEO 1** (p. 14)
 S-video, RCA video, RCA audio cable connection from an external device.
21. **Antenna Input jack** (p. 12)
 RF coaxial cable connection for your antenna or cable TV signal.
22. **Audio Input jack for HDMI 1** (p. 13 / p. 15)
 RCA audio cable connection from a DVI device.
 When you connect your PC that has a DVI terminal, use a stereo mini plug-RCA conversion cable as well. (For HDMI 1 Input jack only)
23. **Audio Output jack** (p. 15)
 RCA audio cable connection for an external device.
24. **HDMI 1 Input jack** (p. 12 / p. 13 / p. 15)
 HDMI connection for HDMI or DVI device.
 When you connect your PC that has a DVI terminal, you can enjoy this unit as a PC monitor.
25. **HDMI 3 Input jack** (p. 12 / p. 13)
 HDMI connection from HDMI device.

Note for USB terminal:

- *User should not connect any devices to the USB terminal such as digital camera, keyboard, mouse, etc. (because these will not work).*
- *The software update is, in most cases, handled by an authorized service person or in some circumstances the user may be asked to do the software upgrade themselves.*

☑ Remote Control Function

Main remote control



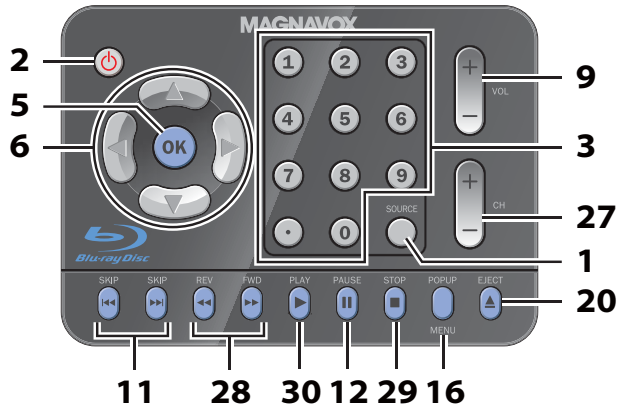
When using a universal remote control to operate this unit.

- *Make sure the component code on your universal remote control is set to our brand.*
 Refer to the manual accompanying your remote control for more details.

Note:

- *This manual is described only the main remote control buttons on each function. The simple remote control is omitted.*

Simple remote control



1. **SOURCE** (p. 19)
 Press to access connected external devices like a BD/DVD recorder.
2. **POWER** ⏻ (p. 17)
 Press to turn the unit on and off.
3. **Number buttons** (p. 18)
 • Press to select channels.
 • Press to select chapter, title (BD/DVD), or track (CD) directly.
 • **(dot)**
 • Press to shift the subchannel from the main channel.
4. **MENU / EXIT** (p. 22 / p. 49)
 Press to display the main menu.
5. **OK** (p. 17)
 Press to decide the command of setting when the main menu is displayed.
6. **◀ / ▶ / ▲ / ▼** (p. 17)
 Press to move left / right / up / down through the items.
7. **BACK** (p. 20)
 Press to return to the previous menu operation.
8. **PREV CH** (p. 18)
 Press to return to previously viewed channel.
9. **VOL + / –** (p. 18)
 Press to adjust the volume.
10. **MUTE** (p. 18)
 Press to turn the sound on and off.
11. **SKIP ⏮ / ⏭** (p. 44)
 Press to skip forward or backward chapters, titles (BD/DVD) or tracks (CD).
12. **PAUSE ⏸** (p. 19 / p. 40)
 TV mode
 • Press to pause screen image.
 BLU-RAY mode
 • Press to pause the disc playback.
13. **RED / GREEN / BLUE / YELLOW buttons** (p. 41)
 • Press to select items on some BD menus. (BD)
 • In the File list, Random or Program playback mode, press to switch between pages. (CD)
14. **TOP MENU** (p. 39)
 Press to display the top menu (BD/DVD).

15. **MODE** (p. 41)
 - Press to display the setting for the rapid playback and the picture adjustment (BD/DVD).
 - Press to display the setting for the virtual surround (BD/DVD).
 - Press to display the setting for the noise reduction (DVD).
 - In stop mode with BD inserted, press to display a menu for setting the BD audio mode (BD).
 - In stop mode with audio CD inserted, press to display menus for program and random playback (CD).
16. **POP MENU** (p. 39)
 Press to display the pop-up menu / disc menu (BD/DVD).
17. **SEARCH MODE** (p. 43)
 Press to display the search menu.
18. **CLEAR** (p. 41)
 - Press to clear the numbers entered incorrectly.
 - Press to cancel the point A for A-B repeat.
 - Press to remove the track number in program input (CD).
19. **ANGLE** (p. 48)
 Press to access various camera angles on the disc (BD/DVD).
20. **EJECT ▲** (p. 39)
 Press to eject the disc.
21. **SMART PICTURE** (p. 25)
 Press to select the desired smart picture setting.
22. **SMART SOUND** (p. 26)
 Press to select the desired smart sound setting.
23. **SLEEP** (p. 18)
 Press to activate the sleep timer.
24. **SAP** (p. 19 / p. 47)
 Digital mode (DTV)
 - Press to select the audio language.

 Analog mode (TV)
 - Press to select the audio mode.

 BLU-RAY mode
 - Press to select the audio language (BD/DVD), or sound mode (CD).
25. **FORMAT** (p. 21)
 Press to select aspect ratio available for the TV screen.
26. **INFO** (p. 20 / p. 45)
 Digital mode (DTV)
 - Press to display the channel information, signal type and TV setting.

 Analog mode (TV)
 - Press to display the channel number, signal type and TV setting.

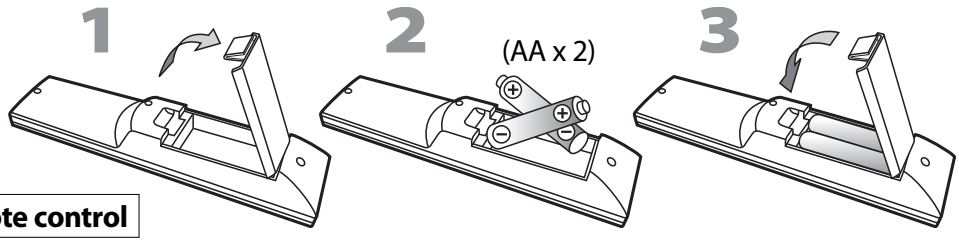
 External input mode
 - Press to display the external input mode, signal type and TV setting.

 BLU-RAY mode
 - Press to display the current status.
27. **CH + / –** (p. 18 / p. 19)
 Press to select channels and the external input mode.
28. **REV ◀◀ / FWD ▶▶** (p. 40)
 Press to begin slow forward playback during the pause mode (BD/DVD) and search forward or backward through the disc.
29. **STOP ■** (p. 39)
 Press to stop the disc playback.
30. **PLAY ▶** (p. 40)
 Press to begin the disc playback.
31. **REPEAT** (p. 41)
 Press to toggle between various repeat modes.
32. **SUBTITLE** (p. 46)
 Press to display the subtitle menu (BD/DVD).
33. **A-B** (p. 41)
 Press to playback a defined section between point A and B repeatedly.
34. **PIP** (p. 48)
 Press to turn the picture-in picture feature on or off (only applicable to BD-video which supports the PIP fiunction).

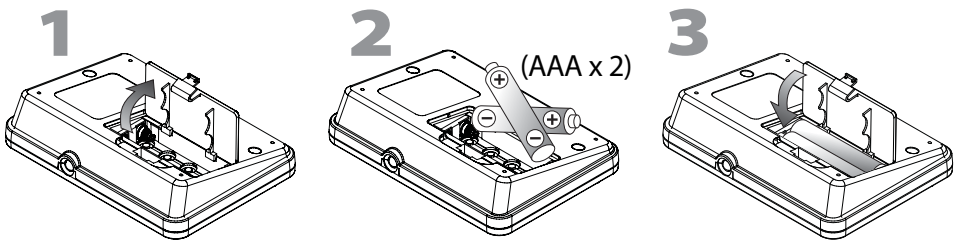
☑ Installing the Batteries

Install the batteries matching the polarity indicated inside battery compartment of the remote control.

Main remote control



Simple remote control



Battery Precautions:

- *Be sure to follow the correct polarity as indicated in the battery compartment. Reversed batteries may cause damage to the device.*
- *Do not mix different types of batteries together (e.g., Alkaline and Carbon-Zinc, or rechargeable batteries like ni-cad, ni-mh, etc) or old batteries with fresh ones.*
- *If the device is not to be used for a long period of time, remove the batteries to prevent damage or injury from possible battery leakage.*
- *Do not try to recharge batteries; they can overheat and rupture.*

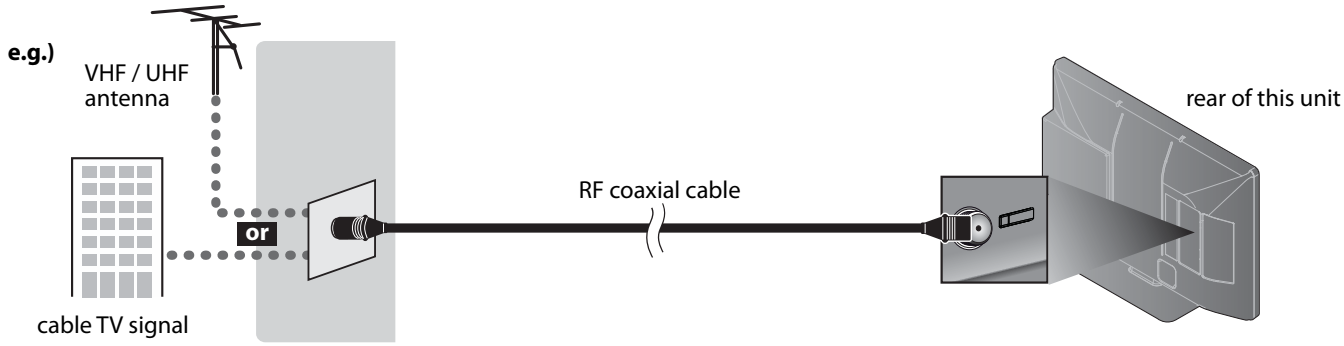
No supplied cables are used in this connection:

Please purchase the necessary cables at your local store.
High Speed HDMI cable (also known as HDMI category 2 cable) is recommended for the better compatibility.

Before you connect...
Be sure your antenna or other device is connected properly before plugging in the AC power cord.

☑ Antenna Connection

Connect the RF coaxial cable on your home outlet to the antenna input jack of this unit.



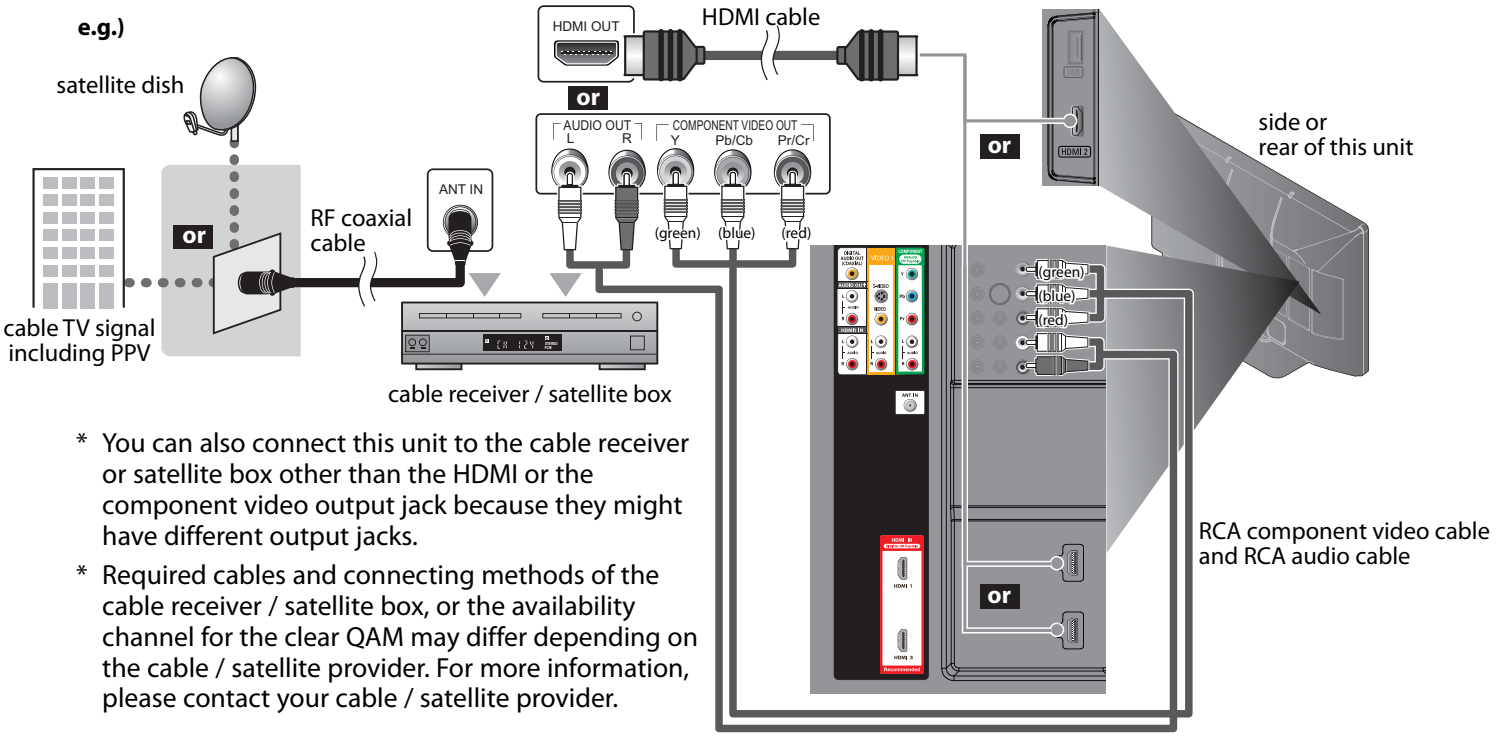
* Once connections are completed, turn on the unit and begin initial setup. Channel scanning is necessary for the unit to memorize all available channels in your area. (Refer to "Initial Setup" on page 17.)

Note:

- *If you have any question about the DTV's antenna, visit www.antennaweb.org for further information.*
- *Depending on your antenna system, you may need different types of combiners (mixers) or separators (splitters). Contact your local electronics store for these items.*
- *For your safety and to avoid damage to this unit, please unplug the RF coaxial cable from the antenna input jack before moving the unit.*
- *If you use an antenna to receive analog TV, it should also work for DTV reception. Outdoor or attic antennas will be more effective than settop versions.*
- *To switch your reception source easily between antenna and cable, install an antenna selector.*
- *If you connect to the cable system directly, contact the CATV installer.*

☑ Connection to Cable Receiver or Satellite Box

Use an HDMI or an RCA component video cable to connect the HDMI or the component video input jack of the unit to the HDMI or the component video output jack of the cable receiver / satellite box.
If you connect to the unit's Component Video Input jack, connect RCA audio cables to the Audio L/R jacks below the Component Video connector.



* You can also connect this unit to the cable receiver or satellite box other than the HDMI or the component video output jack because they might have different output jacks.

* Required cables and connecting methods of the cable receiver / satellite box, or the availability channel for the clear QAM may differ depending on the cable / satellite provider. For more information, please contact your cable / satellite provider.

No supplied cables are used in this connection:

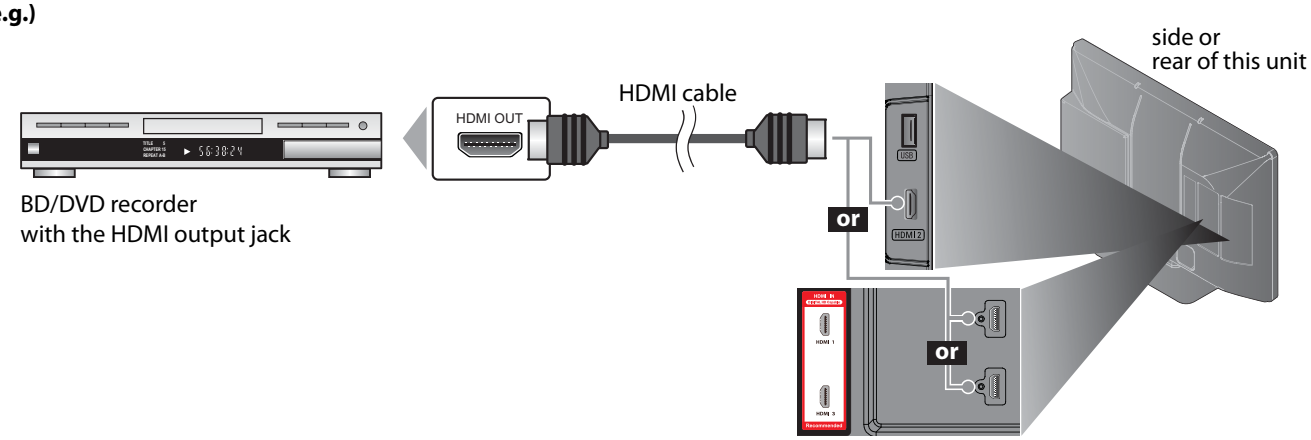
Please purchase the necessary cables at your local store.
High Speed HDMI cable (also known as HDMI category 2 cable) is recommended for the better compatibility.

☑ External Device Connection

[HDMI Connection]

HDMI connection offers the highest picture quality.
HDMI (High-Definition Multimedia Interface) transports high definition video and multi-channel digital audio through a single cable.

e.g.)



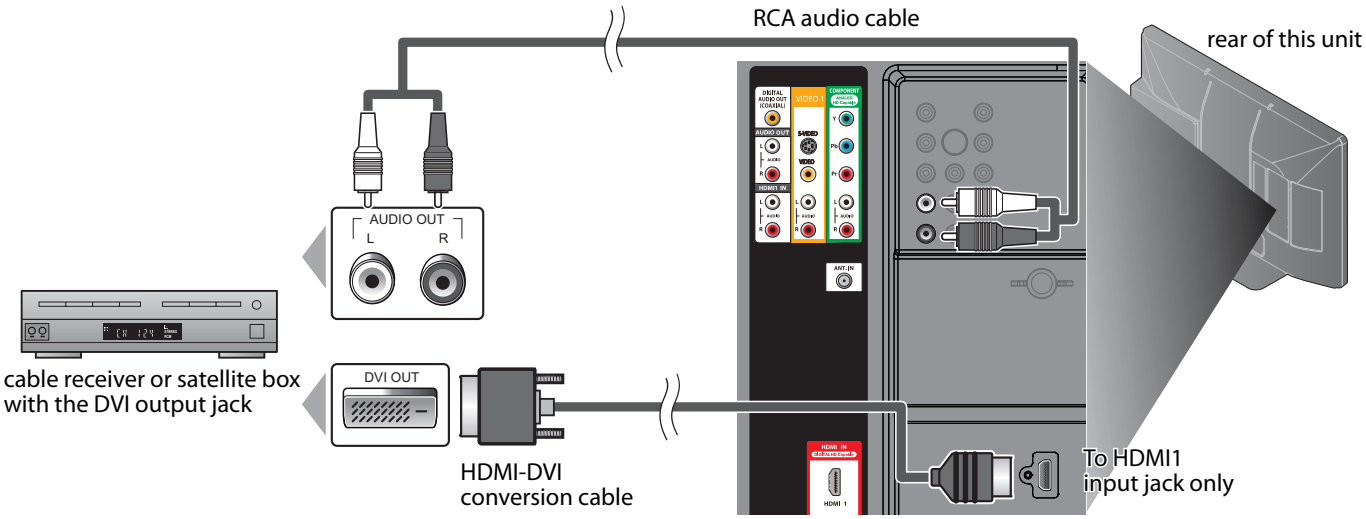
Note:

- *This unit accepts 480i / 480p / 720p / 1080i / 1080p video signals, and 32kHz / 44.1kHz / 48kHz audio signals.*
- *This unit accepts only 2 channel audio signal (LPCM).*
- *You need to select "PCM" for the digital audio of the device you connected or check the HDMI audio setting. There may be no audio output if you select "Bitstream", etc.*
- *This unit only accepts signals in compliance with EIA861.*

[HDMI-DVI Connection]

Use an HDMI-DVI conversion cable to connect the unit to external video devices equipped with DVI output jack.

e.g.)



Note:

- *This unit accepts 480i / 480p / 720p / 1080i / 1080p video signals.*
- *HDMI-DVI connection requires separate RCA audio connections as well.*
- *Audio signals are converted from digital to analog for this connection.*
- *DVI does not display 480i image that is not in compliance with EIA/CEA-861/861B.*

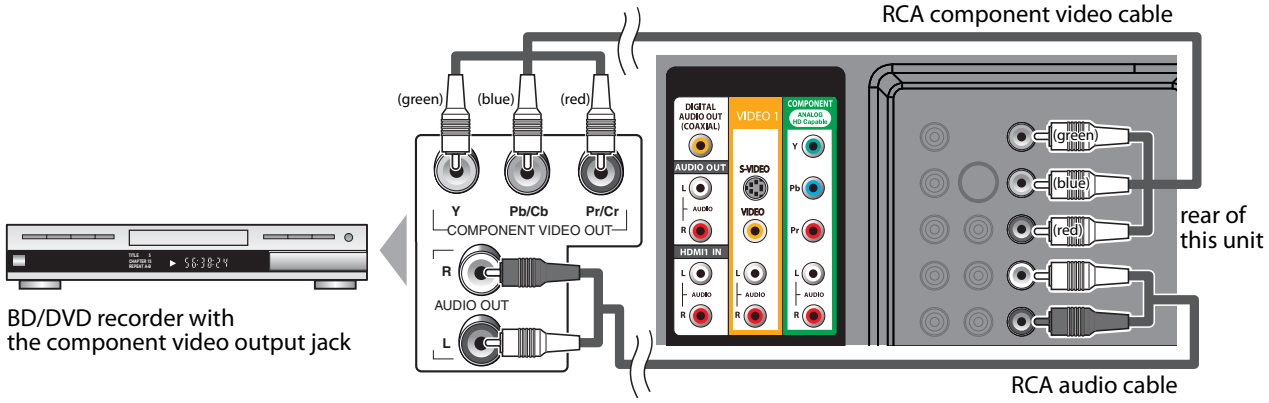
No supplied cables are used in this connection:

Please purchase the necessary cables at your local store.

[Component Video Connection]

RCA component video connection offers better picture quality for video devices connected to the unit.
If you connect to the unit's Component Video Input jack, connect RCA audio cables to the Audio L/R jacks below the Component Video connector.

e.g.)



Note:

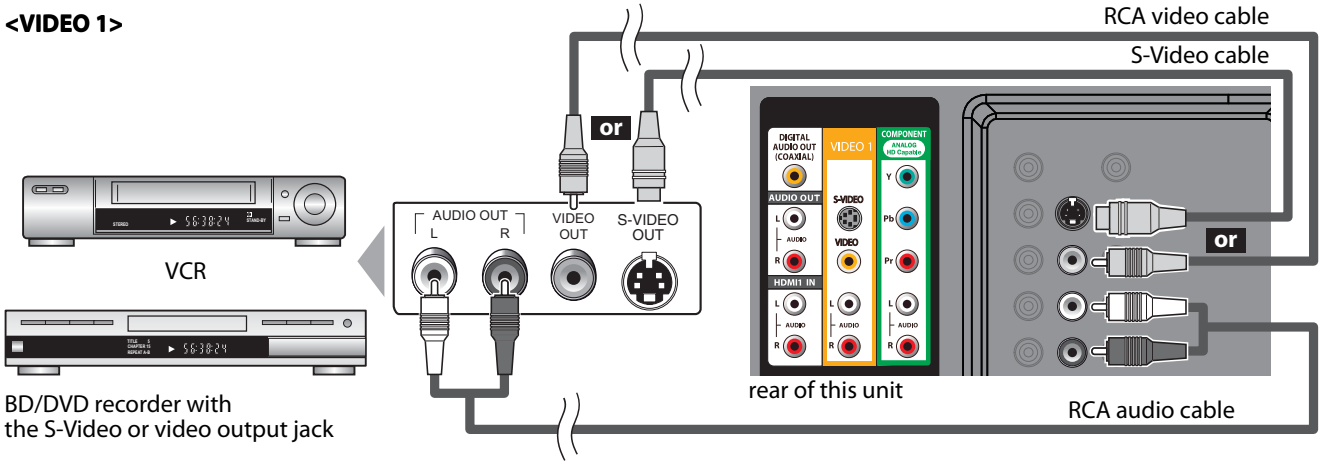
- *This unit accepts 480i / 480p / 720p / 1080i video signals.*

[S-Video or Video Connection]

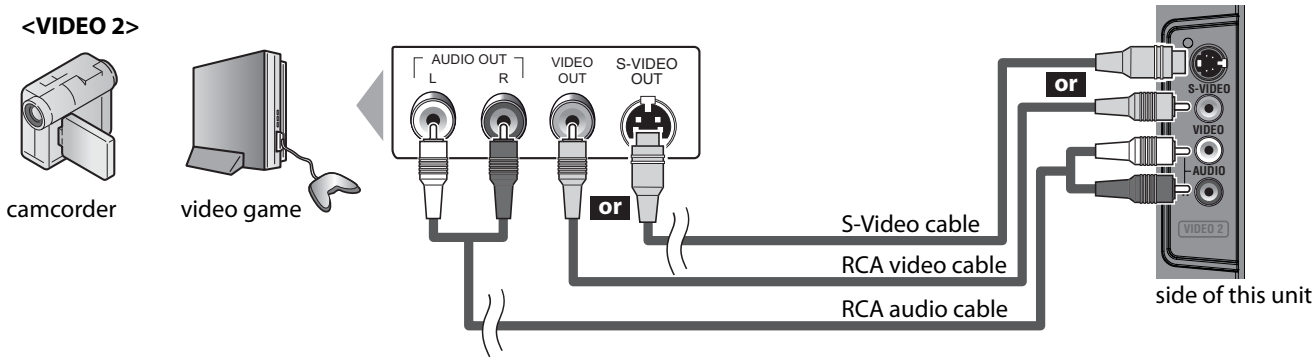
S-video connection offers good picture quality and an RCA video connection offers standard picture quality for video devices connected to the unit.
If you connect to the unit's S-Video Input jack or Video Input jack, connect RCA audio cables to the Audio L/R jacks below the Video connector.
When the audio jack of the video device is monaural, connect an RCA audio cable to the Audio L input jack.

e.g.)

<VIDEO 1>



<VIDEO 2>



Note:

- *If you connect to the S-Video Input jack and the Video Input jack at the same time, the S-Video connection will have priority.*

No supplied cables are used in this connection:

Please purchase the necessary cables at your local store.

[Audio Output Connection]

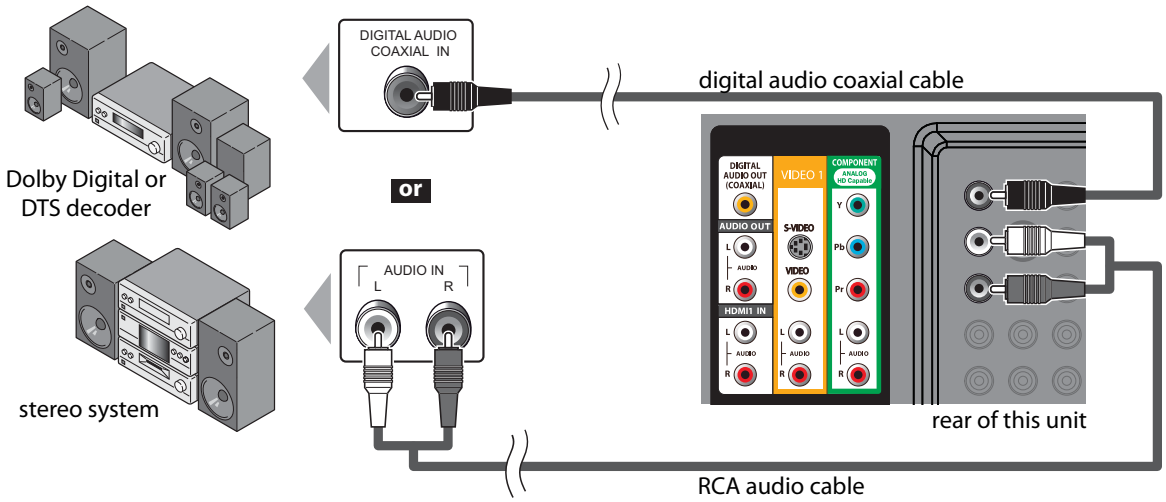
✱ **Digital** (for digital broadcasting only)

If you connect this unit to an external digital audio device, you can enjoy multi-channel audio like 5.1ch digital broadcasting sound. Use a digital audio coaxial cable to connect the unit to external digital audio devices. During BD or DVD playback, you can enjoy Dolby Digital and DTS surround sound.

✱ **Analog** (for both analog and digital broadcasting)

If you connect this unit to an external analog audio device, you can enjoy stereo (2-channel) audio. Use an RCA audio cable to connect the unit to external analog audio devices.

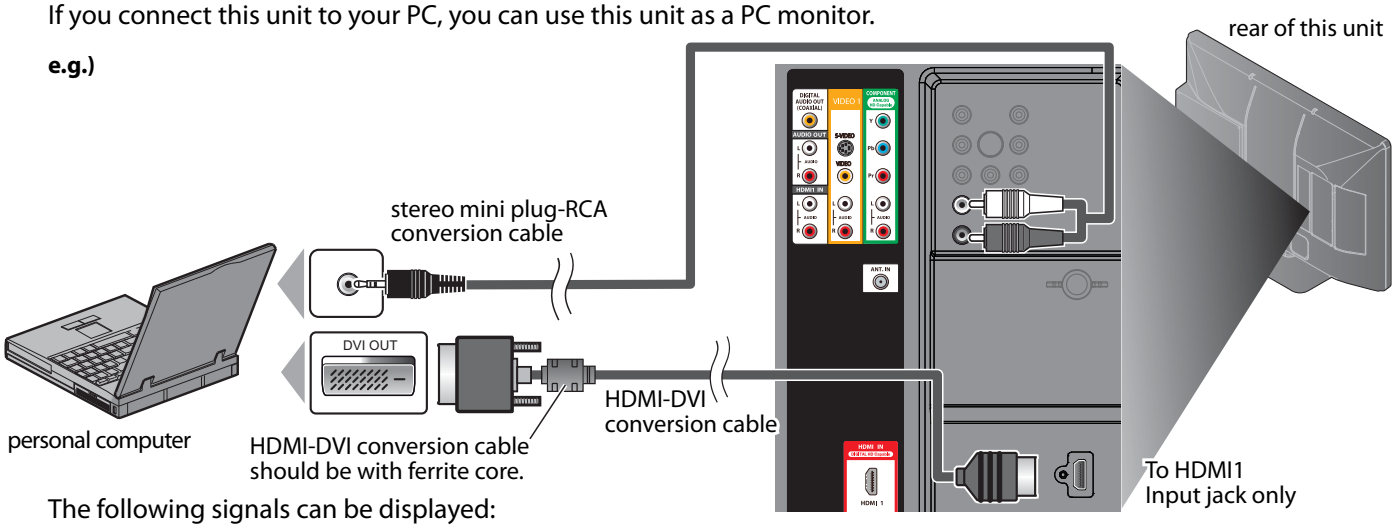
e.g.)



[PC Connection]

This unit can be connected to your PC that has a DVI terminal.
Use an HDMI-DVI conversion cable for this connection and it requires stereo mini plug-RCA conversion cable as well.
If you connect this unit to your PC, you can use this unit as a PC monitor.

e.g.)



The following signals can be displayed:

Format	Resolution	Refresh rate
VGA	640 x 480	60Hz
SVGA	800 x 600	60Hz
XGA	1,024 x 768	60Hz

Format	Resolution	Refresh rate
WXGA	1,280 x 768	60Hz
	1,360 x 768	60Hz
FHD	1,920 x 1,080	60Hz

Other formats or non-standard signals will not be displayed correctly.

Note:

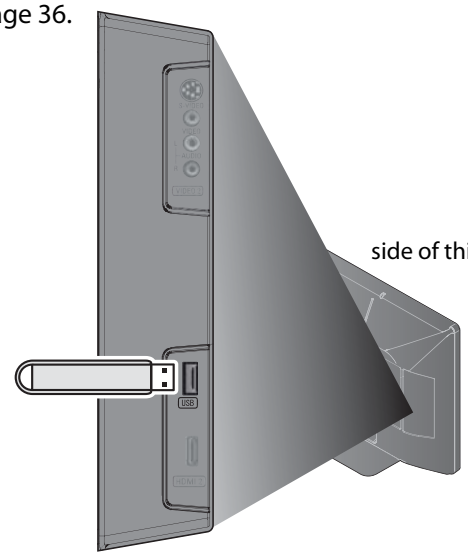
- *Please purchase the HDMI-DVI conversion cable that has a ferrite core.*
- *The following operations may reduce noise.*
 - *Attach a ferrite core to the AC power cord of your PC.*
 - *Unplug the AC power cord and use the built-in battery of your PC.*

Supplied accessories used in this connection are as follows:

- cable management tie x 1
- AC power cord x 1

[USB Flash Memory]

This unit offers easy playback JPEG pictures and MP3 musics.
Insert the USB flash memory to the USB terminal shown as below. For more details, refer to "JPEG/MP3 Playback" on page 36.

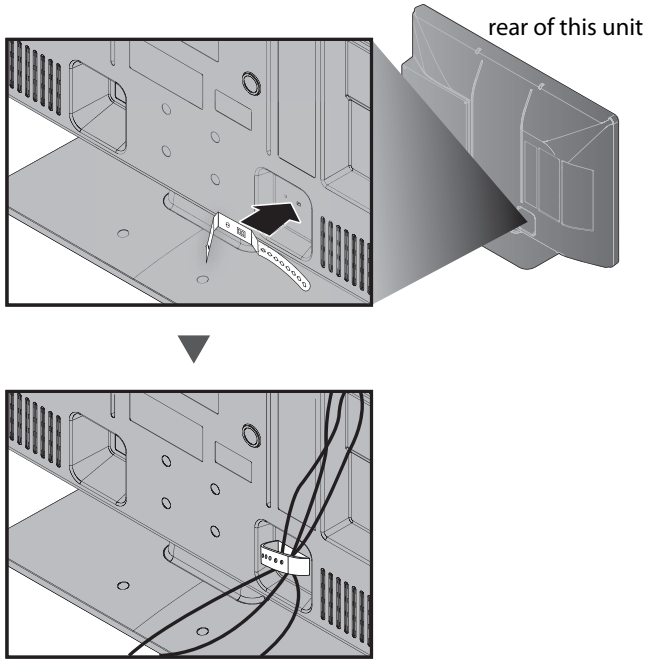


Note:

- *The USB flash memory is not supplied with this unit.*
- *Do not use an extension cord between the USB flash memory and the unit. Always insert the USB flash memory to this unit directly.*
- *We do not guarantee the all USB flash memory can be supported on this unit.*
- *Be sure to keep a backup copy of the original files on your device before you play them back on this unit. We have no responsibilities for damage or loss of your stored data.*
- *When you ready to remove a USB flash memory, at first turn off the unit to avoid any damage for your data and the unit.*
- *If the USB flash memory left behind in the USB terminal and you turn off the unit, the "USB"(main menu) will appear automatically when you turn on the unit again.*

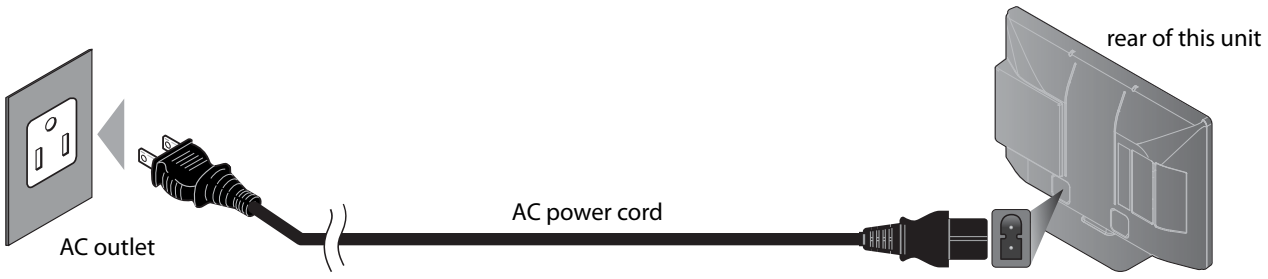
☑ Cable Management

Attach the supplied cable management tie first into the holes on the lower side of the rear of this unit shown as below. Keep the cables through this holder to avoid tangle them.



☑ Plug In the AC Power Cord

Make sure that the AC power cord must be plugged to an AC outlet after all the necessary connections are completed.



Caution:

- *Do not connect the AC power cord to a power supply outside the indicated voltage of this unit (AC 120V). Connecting the AC power cord to a power supply outside of this range may result in fire or electrical shocks.*

Note:

- *Each time you plugged in the AC power cord, any operations will not be performed for a few seconds. This is not a malfunction.*

These operations are accessible by remote control. Some may also be accessible by controls on the main unit.

TV Functions

☑ Initial Setup

This section will guide you through the unit's initial setting which includes selecting a language for your on-screen menu and autoprogram, which automatically scans and memorizes viewable channels.

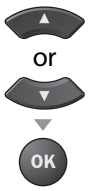
Before you begin:
Make sure the unit is connected to antenna or cable.

1 After making all the necessary connections, press **[POWER ⏻]** to turn on the unit.



- This operation may take a few moments.

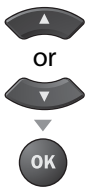
2 Use **[Cursor ▲/▼]** to select the on-screen language from the choices on the right side of the TV screen. (English / Español / Français)

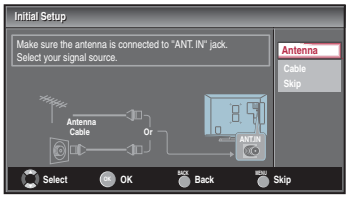




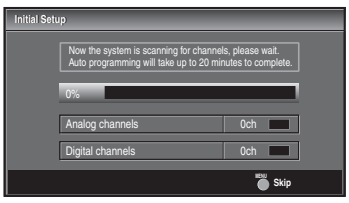
- "Initial Setup" menu on step 3 will be displayed in the selected language after you press **[OK]**.

3 Use **[Cursor ▲/▼]** to select "Antenna" for TV channels or "Cable" for CATV channels, then press **[OK]**.





- "Autoprogram" will begin.



4 Use **[Cursor ◀/▶]** to select the desired location setting, then press **[OK]**.





- Select "Retail", the unit will be set up with predefined setting for retail displays. In this setting, the power consumption may possibly exceed the limited requirement of the ENERGY STAR® qualification.
- Select "Home", the unit is set to maximize the energy efficiency for home setting and it can be adjusted through a choice of picture and sound quality according to your preference.
- When the initial setup is completed, the lowest memorized channel with the confirmation message of the location setting will be displayed on the TV screen.

Note:

- *If you connect the cable system directly, contact the CATV installer.*
- *If you press **[POWER ⏻]** or **[MENU / EXIT]** during autoprogram, this setting will be canceled.*
- *The initial autoprogram function can be executed for either "Antenna" or "Cable" only once. When you change the connection (Antenna / Cable), set autoprogram again. (Refer to page 22.)*
- *If there is no signal input from the antenna terminal and no operation for several seconds after you turn on the unit, "Helpful Hints" appears. Follow the instructions listed on the TV screen.*



- *You must set "Home" in step 4. Otherwise, the settings of picture and sound quality you adjusted will not be memorized after you turn off the unit.*

After an initial setup is completed...

- If you want to scan the channels automatically again, refer to "Autoprogram" on page 22.
- You can add the desired channels unmemorized by "Autoprogram". Refer to "Add Channels" on page 23.
- If you want to change to another language, refer to "Language Selection" on page 24.
- If you want to change the location setting, refer to "Location" on page 35.

☑ Channel Selection

Select channels by using [CH + / −] or [the Number buttons].

- To select the memorized channels, use **[CH + / −]** or **[the Number buttons]**.
- To select the non-memorized channels, use **[the Number buttons]**.

To Use [the Number buttons]

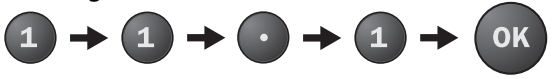
TV

- When selecting analog channel 11



DTV

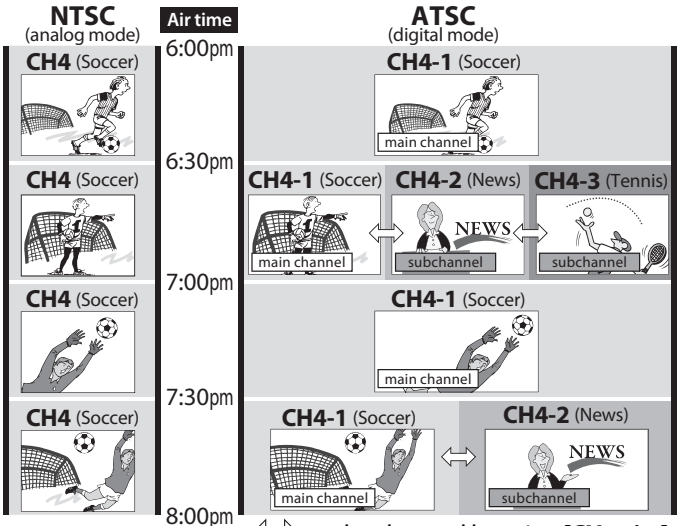
- When selecting digital channel 11.1
 Be sure to press **[•]** before entering the subchannel number.



- Press **[PREV CH]** to return to the previously viewed channel.

About digital TV broadcasting:

With its high definition broadcast, digital broadcasting far surpasses analog broadcasting in both its picture and sound quality. Not all digital TV broadcasts are high definition (HD). To confirm whether your watching TV program is in HD, refer to the program guide, contact your cable / satellite provider or local TV stations.



What is the subchannel?

By using high compression technology, digital broadcasting offers a service that enables multiple signals to send simultaneously.

Therefore, you can select more than one program per main channel since digital broadcasting technology distinguishes between multiple channels broadcast by a single network.

Note:

- *"No Signal" will appear on the TV screen after the subchannel broadcast is over.*
- *"Audio only program" message will appear on the TV screen, when you receive only sound signal.*

☑ Volume Adjustment

This section describes how to adjust the volume. The mute function, which turns the sound off and on, is also described.

Use **[VOL + / −]** to adjust the audio volume.



The volume bar will be displayed at the bottom of the TV screen when adjusting the volume.

- The volume bar will automatically disappear in a few seconds.

Press **[MUTE]** to turn off and on the sound.



"Mute" is displayed on the TV screen for a few seconds.

Press **[MUTE]** again or **[VOL + / −]** to recover the original volume.

☑ Sleep Timer

The sleep timer can be set to automatically turn off the unit after an incremental period of time.

1 Press **[SLEEP]** to set the sleep timer.



Sleep timer display appears on the TV screen.

2 Press **[SLEEP]** repeatedly to change the amount of time until shut off.



You can set your unit to turn off after a set period of time (from 30 to 120 minutes).

- Each press of **[SLEEP]** will increase the time by 30 minutes.
- After setup, the sleep timer display can be called up for checking by pressing **[SLEEP]**.

To cancel the sleep timer

Press **[SLEEP]** repeatedly until "Sleep Off" is displayed on the TV screen.

Note:

- *The sleep timer display will automatically disappear in a few seconds.*
- *When you disconnect the unit from the AC outlet or when a power failure occurs, the sleep timer setting will be canceled.*

☑ Still Mode

You can pause the image shown on the TV screen.

Press **[PAUSE ❚❚]** to pause the image shown on the TV screen.



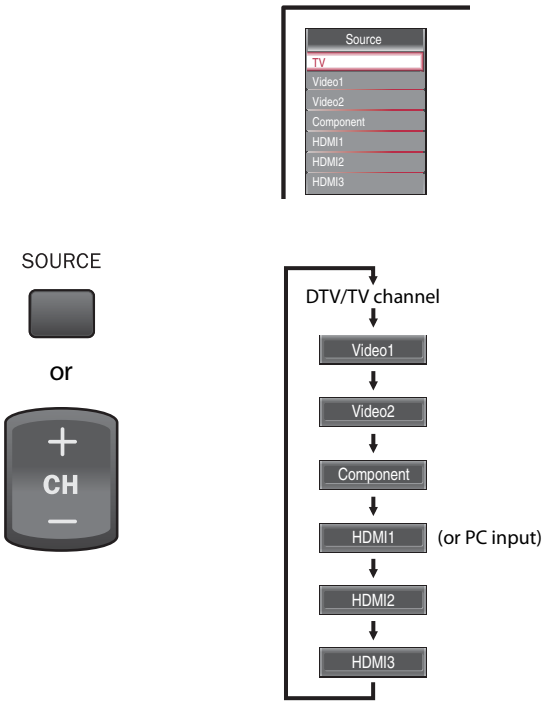
- The sound output will not be paused.
- If no signal is detected or protected signal is received during still mode, the image remains paused and the sound output will be muted.
- The still function will be released after 5 minutes.

To cancel still mode, press any button except **[POWER ⏻]**.

☑ Switching Each Input Mode

You can easily switch with the remote control to the DTV (ATSC) and TV (NTSC) or to access external devices when they are connected to the unit.

Press **[SOURCE]** or **[CH +]** repeatedly to cycle through the input modes.



- Pressing **[CH −]** reverses the direction of the input modes.

☑ Switching Audio Mode

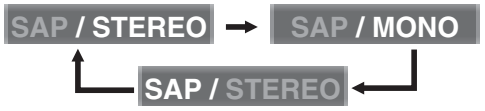
This section describes how to switch the audio in the analog mode and how to switch the audio language in the digital mode.

TV

Press **[SAP]** to display the currently selected audio mode. While receiving an MTS broadcast, press repeatedly to cycle through the available audio channel.



When all audio are available



When stereo and monaural audio are available



When SAP and monaural audio are available



When only monaural audio is available



(cannot be switched)

STEREO : Outputs stereo-audio
SAP : Outputs second audio program
MONO : Outputs mono-audio

DTV

1 Press **[SAP]** to display the currently selected language and the number of available languages.



2 Press **[SAP]** repeatedly to cycle through the available audio languages.



- Available languages differ depending on the broadcast. "Other" is displayed when the audio language cannot be acquired, or the acquired languages are other than English, Spanish or French.

Note:

- ***[SAP]*** *does not control external audio devices.*
- *The information display will automatically disappear in a few seconds.*

☑ TV Screen Information

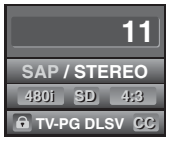
You can display the currently selected channel or other information such as the audio mode on the TV screen.

TV

In the analog mode, the current channel number and the audio mode are displayed.

Press **[INFO]**.





- The current channel number, audio mode, type of resolutions for video signal, TV aspect ratio, CC and TV program rating are displayed on the top-right corner of the TV screen.
- To clear the display, press **[INFO]** again. You can also press **[BACK]**.

DTV

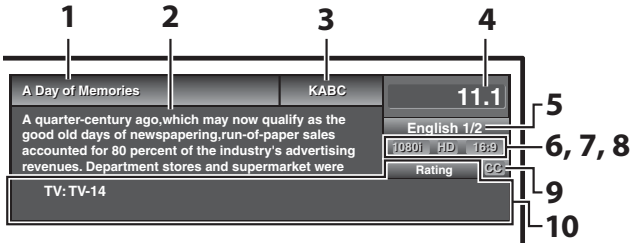
In the digital mode, the detailed broadcasting information for the current channel such as program title, program guides are displayed.

Press **[INFO]** to display the details of the currently selected program.



Broadcasting information

The following information is displayed.



1 program title
2 program guide
(The program guide added to broadcasting information is displayed to a maximum of 4 lines.)
3 broadcast station
4 channel number
5 audio language
(Refer to "Switching Audio Mode" on page 19.)
6 effective scanning lines and scan mode
7 digital TV format
8 program aspect ratio
9 CC (not available if closed caption is set to "Off")
10 child lock rating

Note:

- *When the program guide consists of more than 4 lines, use **[Cursor ▲/▼]** to scroll.*
- *"No description provided." is displayed when the program guide is not provided.*
- *While the program guide is displayed, the closed caption function is interrupted.*
- *In external input mode, the following screen is displayed; e.g.) When an external device is connected to Video input jack.*



- *The information display will automatically disappear in 1 minute.*

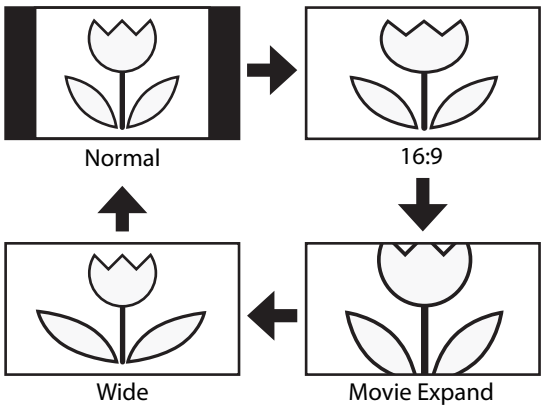
☑ TV Screen Display Mode

4 types of display modes can be selected when the broadcasting station is sending 4:3 or 16:9 video signal. And 3 types of display modes can be selected for PC input signal.

Press **[FORMAT]** repeatedly to switch the TV aspect ratio.



For 4:3 video signal



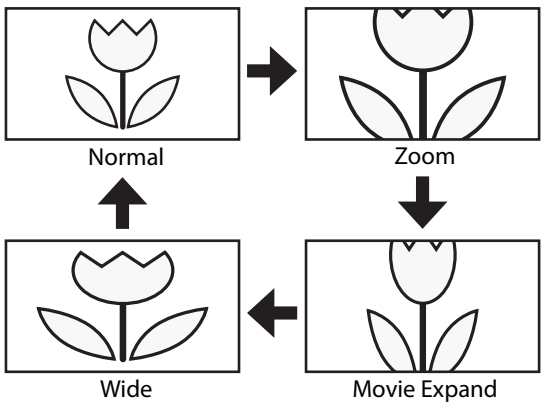
Normal
Display a 4:3 picture at its original size. Sidebars appear on both edges of the screen.

16:9
Display a 4:3 picture at a 16:9 size; the picture is stretched horizontally to fill the screen.

Movie Expand
Display a 4:3 picture at a 16:9 size; the picture is stretched horizontally and vertically to fill the screen. This crops out the top and bottom of the picture.

Wide
Display the picture with its center at the original size and the edges stretched horizontally to fill the screen.

For 16:9 video signal



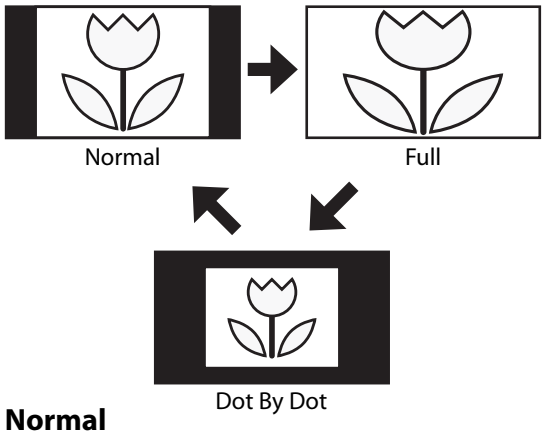
Normal
Display a 16:9 picture at its original size.

Zoom
Display a 16:9 picture at its maximum size without changing its horizontal and vertical ratio.

Movie Expand
Display a vertically stretched picture.

Wide
Display a horizontally stretched picture.

For PC input signal through HDMI1 Input mode



Normal
Display a proportionately stretched picture. Sidebars appear on both edges of the screen.

Full
Display a picture that is stretched out of proportion to fill the screen.

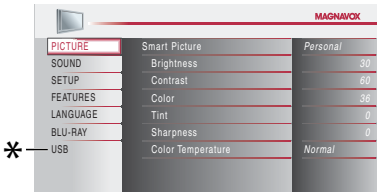
Dot By Dot
Display a picture in its original size.

☑ Main Menu

This section describes the overview of the main menu displayed when you press [MENU / EXIT]. For more details, see the reference page for each item. The main menu consists of the function setting items below.

Press **[MENU / EXIT]**.





* "USB" will appear only when the USB flash memory is inserted to this unit.

PICTURE

You can adjust the picture quality.
(Refer to "Picture Adjustment" on page 25.)

SOUND

You can adjust the sound quality.
(Refer to "Sound Adjustment" on page 26.)

MENU

- You can automatically scan the viewable channels.
 (Refer to "Autoprogram" on page 22.)
- You can skip the undesired channels when selecting the channels using **[CH + / −]**.
 (Refer to "Channel List" on page 23.)
- You can add the channels that were not scanned by the autoprogram.
 (Refer to "Add Channels" on page 23.)

FEATURES

- You can change the display format for closed caption, which displays the dialogue of a TV program or other information across the TV screen.
 (Refer to "Closed Caption" on page 27.)
- You can set the viewing limitations.
 (Refer to "Child Lock" on page 30.)
- You can adjust the position, stability and clarity of the PC screen.
 (Refer to "PC Settings" on page 34.)
- You can select the energy saving mode.
 (Refer to "Energy Saving Mode" on page 35.)
- When you adjust the desired "PICTURE" and "SOUND" mode, you must switch the setting from "Retail" to "Home". (Refer to "Location" on page 35.)
- You can confirm the version of the software currently used in this unit.
 (Refer to "Current Software Info" on page 36.)

LANGUAGE

You can change the language (English, Spanish, French) displayed on the main menu.
(Refer to "Language Selection" on page 24.)

BLU-RAY

You can customize some functions for the disc playback. Make sure the player is in stop mode.
(Refer to "BLU-RAY SETTING" section on page 49.)

USB

You can view the picture or listen to the music that the JPEG or the MP3 files stored in a USB flash memory.
(Refer to "JPEG/MP3 Playback" on page 36.)

Note:

** "USB" will appear only when the USB flash memory is inserted to this unit.*

☑ Autoprogram

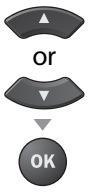
If you switch wires (e.g., between antenna and CATV) or if you move the unit to a different area after the initial setting, or if you restore the DTV channel you deleted, you will need to perform autoprogram.

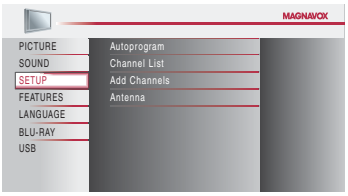
Before you begin: **Make sure the unit is connected to antenna or cable.**

1 Press **[MENU / EXIT]** to display the main menu.

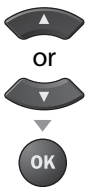


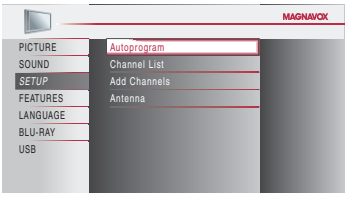
2 Use **[Cursor ▲/▼]** to select "SETUP" , then press **[OK]**.



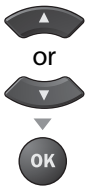


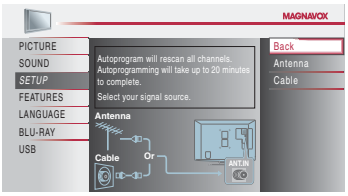
3 Use **[Cursor ▲/▼]** to select "Autoprogram", then press **[OK]**.



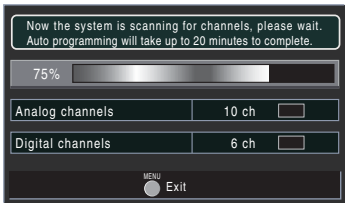


Use **[Cursor ▲/▼]** to select an appropriate option, then press **[OK]**.





- When aerial antenna is connected, select "Antenna".
- When connected to CATV, select "Cable".
- "Autoprogram" will begin.



- When the scanning and memorizing are completed, the lowest memorized channel will be displayed.

Note:

- *After setting "Autoprogram", using **[CH + / −]** on the remote control skips unavailable programs automatically.*
- *If you connect the cable system directly, contact the CATV installer.*
- *If you press **[POWER ⏻]** or **[MENU / EXIT]** during autoprogram, the setting will be canceled.*
- *Even if "Autoprogram" is completed, the channel setting will be lost if the AC power cord is unplugged before turning off the unit by pressing **[POWER ⏻]**.*
- *The PIN Code will be required once you set a PIN Code in the "Child Lock" (Refer to page 30).*
- *If you want to change your PIN Code, follow the instruction of "Change PIN" (Refer to page 33).*

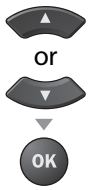
☑ Channel List

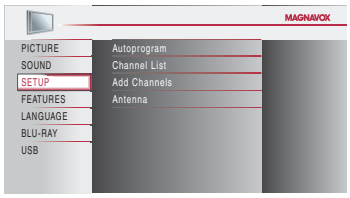
The channels selected here can be skipped when selecting the channels using [CH + / −].
Those channels can still be selected with [the Number buttons].

1 Press **[MENU / EXIT]** to display the main menu.

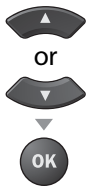


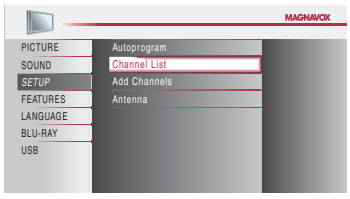
2 Use **[Cursor ▲/▼]** to select "SETUP", then press **[OK]**.



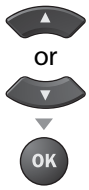


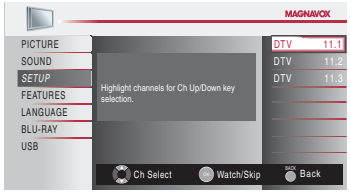
3 Use **[Cursor ▲/▼]** to select "Channel List", then press **[OK]**.





4 Use **[Cursor ▲/▼]** to select the channel you want to remove, then press **[OK]**.





- The channel display for the removed channel darkens. You will not be able to select the channel again using **[CH + / −]**.
- To reactivate a removed channel, use **[Cursor ▲/▼]** and press **[OK]**. The registered channels are highlighted.
- When you remove a main channel, its subchannels are removed as well.

Note:
- *The channel with the "DTV" indicated on the display is ATSC. Otherwise the channel is NTSC.*

5 Press **[MENU / EXIT]** to exit.



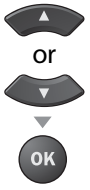
☑ Add Channels

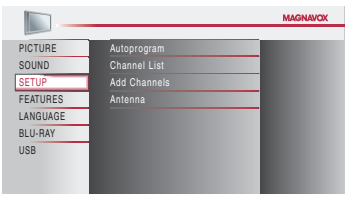
This function lets you add the channels that were not added by the autoprogram due to the receptible condition at the initial setting.

1 Press **[MENU / EXIT]** to display the main menu.

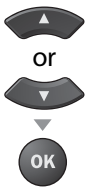


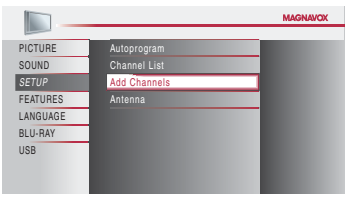
2 Use **[Cursor ▲/▼]** to select "SETUP", then press **[OK]**.



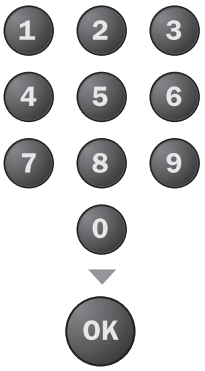


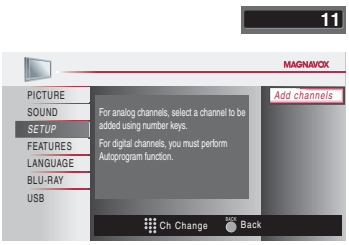
3 Use **[Cursor ▲/▼]** to select "Add Channels", then press **[OK]**.





4 Use **[the Number buttons]** to enter the number of the channel you want to add, then press **[OK]**.





5 Press **[MENU / EXIT]** to exit.



Note:
- *If setup completes successfully, "Added to the channel list" is displayed.*
- *If external input is used, it is not possible to register the channel and "Unavailable" will be displayed on the TV screen.*
- *By using **[CH + / −]**, you can select the memorized channels only.*

☑ Antenna Confirmation

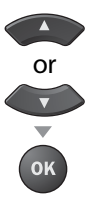
DTV

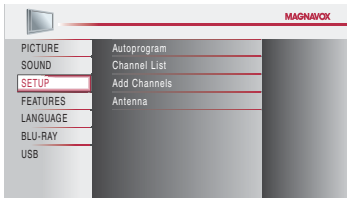
This function lets you check the digital signal strength of each channel.

1 Press **[MENU / EXIT]** to display the main menu.

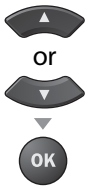


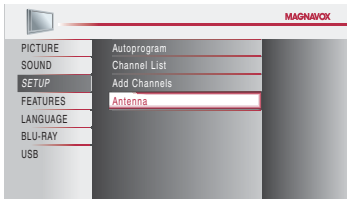
2 Use **[Cursor ▲/▼]** to select “SETUP”, then press **[OK]**.



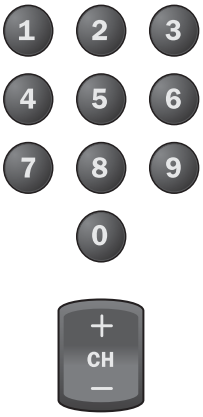


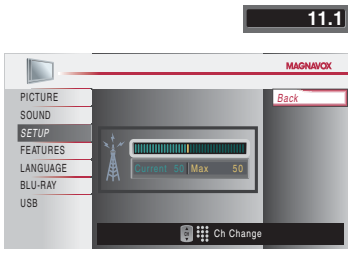
3 Use **[Cursor ▲/▼]** to select “Antenna”, then press **[OK]**.



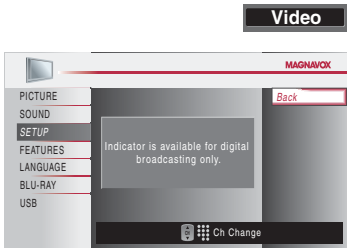


4 Use **[the Number buttons]** or **[CH + / −]** to select the channel for which you want to check the digital signal strength.





- If the channel is set to analog channel or external input, you cannot confirm the antenna condition.



5 Press **[MENU / EXIT]** to exit.



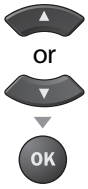
☑ Language Selection

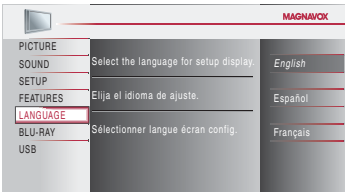
You can choose English, Spanish, or French as your on-screen language.

1 Press **[MENU / EXIT]** to display the main menu.

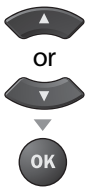


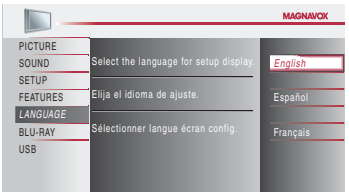
2 Use **[Cursor ▲/▼]** to select “LANGUAGE”, then press **[OK]**.





3 Use **[Cursor ▲/▼]** to select “English”, “Español” or “Français”, then press **[OK]**.





4 Press **[MENU / EXIT]** to exit.



Note:

- *If you need the English menus instead of the Spanish or French menus, press **[MENU / EXIT]**. Use **[Cursor ▲/▼]** to select “IDIOMA” or “LANGUE”, then press **[OK]**. Use **[Cursor ▲/▼]** to select “English”, then press **[OK]**. Press **[MENU / EXIT]** to exit the main menu.*

☑ Picture Adjustment

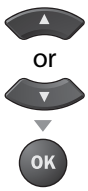
You can adjust brightness, contrast, color, tint, sharpness and color temperature.

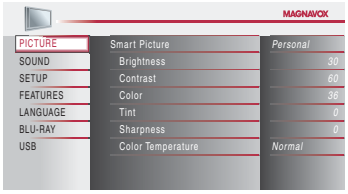
Before you begin: **You must set "Home" in "Location" (Refer to page 35). Otherwise, the settings you adjusted will not be memorized after you turn off the unit.**

1 Press **[MENU / EXIT]** to display the main menu.

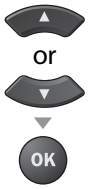


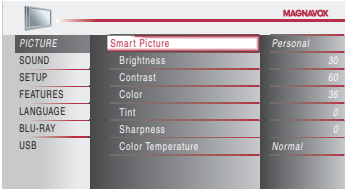
2 Use **[Cursor ▲/▼]** to select "PICTURE", then press **[OK]**.





3 Use **[Cursor ▲/▼]** to select the item you want to adjust, then press **[OK]**.

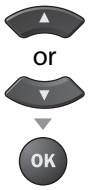


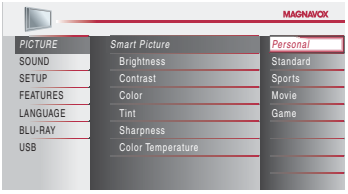


4 Adjust the picture quality.

Smart Picture

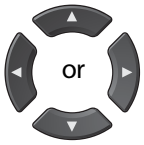
Use **[Cursor ▲/▼]** to select the desired setting, then press **[OK]**.
("Personal", "Standard", "Sports", "Movie" and "Game")

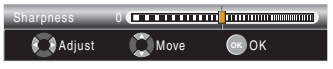




Brightness, Contrast, Color, Tint, Sharpness, Color Temperature

Use **[Cursor ▲/▼]** to select the desired setting, then use **[Cursor ◀/▶]** to adjust.



	Cursor ◀	Cursor ▶
Brightness 	to decrease brightness	to increase brightness
Contrast 	to decrease contrast	to increase contrast
Color 	to decrease color intensity	to increase color intensity
Tint 	to add red	to add green
Sharpness 	to soften	to sharpen
Color Temperature 	to add warm colors	to add cool colors

5 Press **[MENU / EXIT]** to exit.



Note:

- *If you press **[SMART PICTURE]**, the items for "Smart Picture" ("Personal", "Standard", "Sports", "Movie" and "Game") will appear at the upper left of the TV screen, in which you can switch to the desired setting.*
- *To cancel picture adjustment, press **[MENU / EXIT]**.*
- *Only the "Personal" setting can be adjusted.*

☑ Sound Adjustment

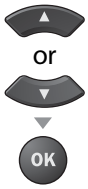
You can adjust the smart sound, equalizer and some other sound functions.

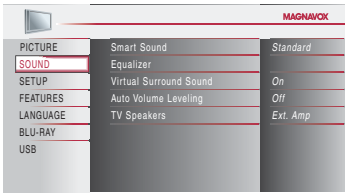
Before you begin: **You must set "Home" in "Location" (Refer to page 35). Otherwise, the settings you adjusted will not be memorized after you turn off the unit.**

1 Press **[MENU / EXIT]** to display the main menu.

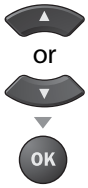


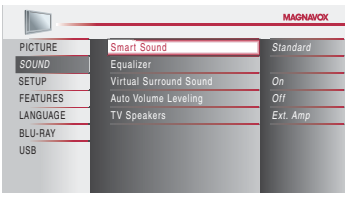
2 Use **[Cursor ▲/▼]** to select "SOUND", then press **[OK]**.





3 Use **[Cursor ▲/▼]** to select the sound type you want to adjust, then press **[OK]**.

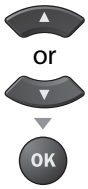


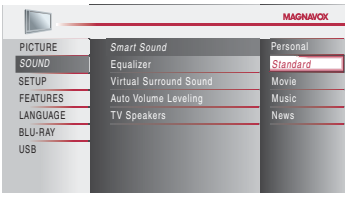


4 Adjust the following items.

Smart Sound

Use **[Cursor ▲/▼]** to select the desired setting, then press **[OK]**.
("Personal", "Standard", "Movie", "Music" and "News")

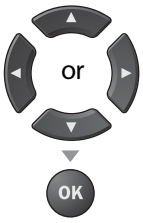


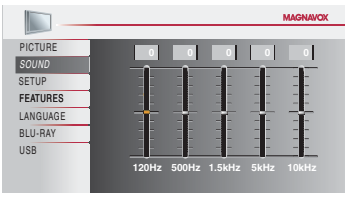


Equalizer

Adjust tonal quality for each frequencies.

Use **[Cursor ◄/►]** to select the specific frequency and use **[Cursor ▲/▼]** to adjust the level, then press **[OK]**.

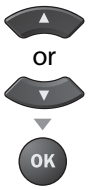


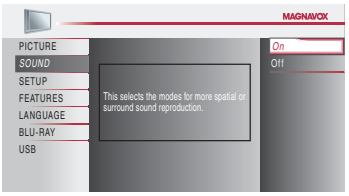


Virtual Surround Sound

Virtual Surround Sound gives you the stereo phonic virtual space through your existing 2-channel stereo system.

Use **[Cursor ▲/▼]** to select the desired option, then press **[OK]**.



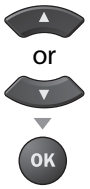


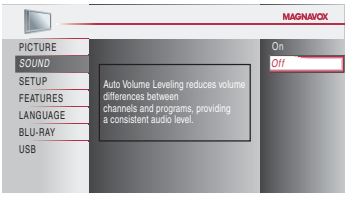
On	Emphasized effect.
Off	Natural effect.

Auto Volume Leveling

This function keeps a constant loudness differential between the TV commercials and the programs.

Use **[Cursor ▲/▼]** to select the desired option, then press **[OK]**.



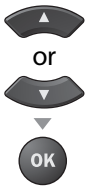


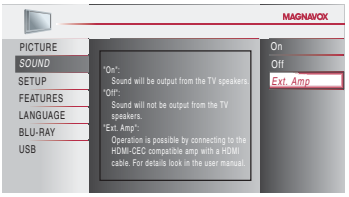
On	Select if you want to reduce volume differences between the TV commercials and the programs.
Off	Select if you want to remove the auto volume leveling.

TV Speakers

Select the audio output from the unit's speakers, or not. If your amplifier compatible with the CEC function is connected to this unit using an HDMI cable, some part of the sound operations such as volume up can access synchronized by using this unit's remote control.

Use **[Cursor ▲/▼]** to select the desired option, then press **[OK]**.





On	The sound will be output from the unit's speakers.
Off	The sound will not be output from the unit's speakers.
Ext. Amp	This function allows you to control audio output from CEC-compatible devices with the unit's remote control.

5 Press **[MENU / EXIT]** to exit.



Note:

- *If you press **[SMART SOUND]**, the items for "Smart Sound" ("Personal", "Standard", "Movie", "Music" and "News") will appear at the upper left of the TV screen, in which you can switch to the desired setting.*
- *To cancel sound adjustment, press **[MENU / EXIT]**.*
- *We do not guarantee 100% interoperability with other brands of CEC compliant devices.*

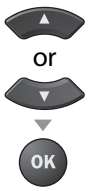
☑ Closed Caption

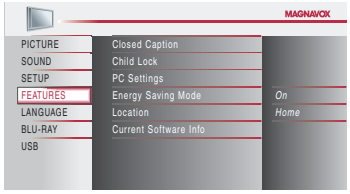
You can view closed captioning (CC) for TV programs, movies and news. Closed caption refers to text of dialogue or descriptions displayed on-screen.

1 Press **[MENU / EXIT]** to display the main menu.

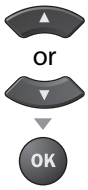


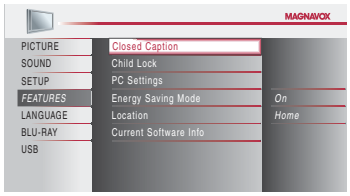
2 Use **[Cursor ▲/▼]** to select “FEATURES”, then press **[OK]**.



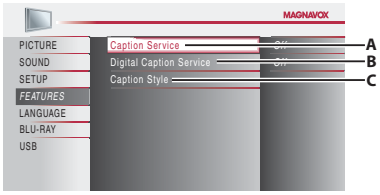


3 Use **[Cursor ▲/▼]** to select “Closed Caption”, then press **[OK]**.





See the following description for setting each item.



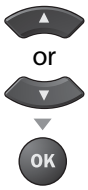
A···“A. Caption Service” ⇨ page 27

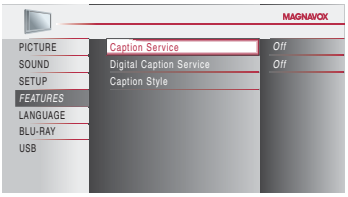
B···“B. Digital Caption Service” ⇨ page 28

C···“C. Caption Style” ⇨ page 28

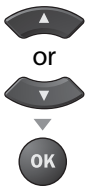
A. Caption Service

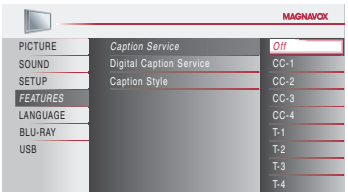
4 Use **[Cursor ▲/▼]** to select “Caption Service”, then press **[OK]**.





5 Use **[Cursor ▲/▼]** to select the desired closed caption, then press **[OK]**.





Caption mode

CC-1 and T-1;
are the primary caption and text services.
The captioning or text is displayed in the same language as the program’s dialogue
(up to 4 lines of script on the TV screen, where it does not obstruct relevant parts of the picture).

CC-3 and T-3;
serve as the preferred data channels.
The captioning or text is often a secondary language.

CC-2, CC-4, T-2 and T-4;
are rarely available and broadcasters use them only in special conditions, such as when “CC-1” and “CC-3” or “T-1” and “T-3” are not available.

- There are 3 display modes according to programs:

Paint-on mode:
Displays input characters on the TV screen immediately.

Pop-on mode:
Once characters are stored in memory, they are displayed all at once.

Roll-up mode:
Displays the characters continuously by scrolling (max. 4 lines).

6 Press **[MENU / EXIT]** to exit.

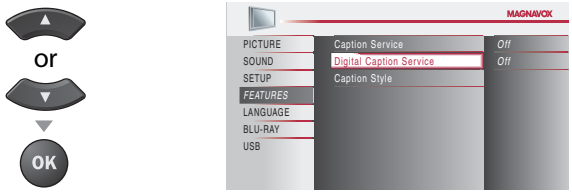


B. Digital Caption Service

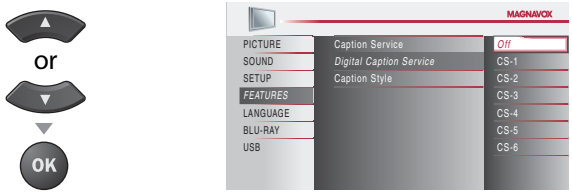
DTV

In addition to the basic closed caption described on page 27, DTV has its own closed caption called digital caption service. Use this menu to change the settings for digital caption service.

4 Use **[Cursor ▲/▼]** to select "Digital Caption Service", then press **[OK]**.



5 Use **[Cursor ▲/▼]** to select the desired digital caption service, then press **[OK]**.



Off	Select if you do not want digital caption service. This is the default.
CS-1 to CS-6	Select one of these before changing any other item in "Closed Caption" menu. Choose "CS-1" under normal circumstances.

6 Press **[MENU / EXIT]** to exit.



Note:

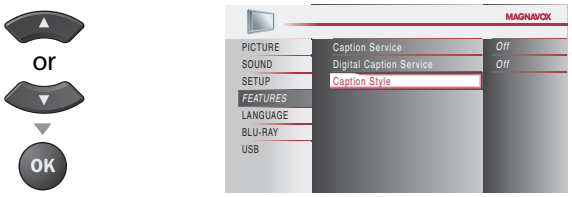
- *"Digital Caption Service" that you can switch differs depending on the broadcast description.*

C. Caption Style

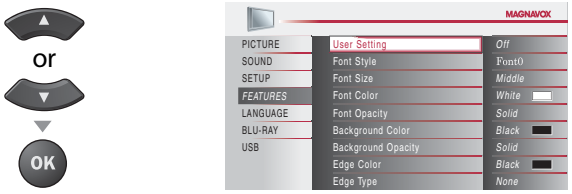
DTV

You can change the caption style such as font, color or size, etc.

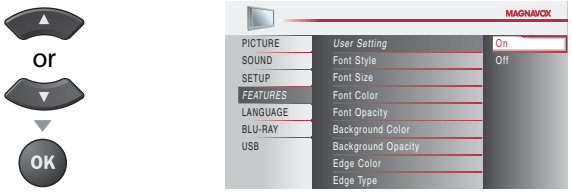
4 Use **[Cursor ▲/▼]** to select "Caption Style", then press **[OK]**.



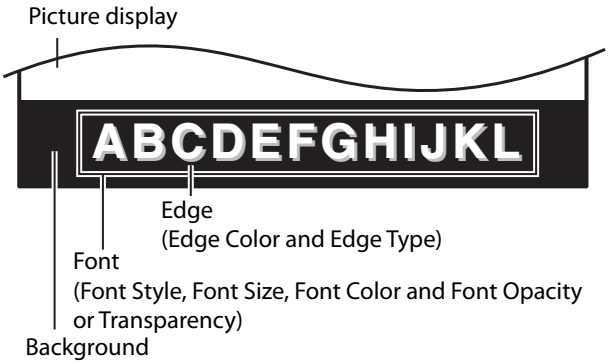
5 Use **[Cursor ▲/▼]** to select "User Setting", then press **[OK]**.



6 Use **[Cursor ▲/▼]** to select "On", then press **[OK]**.



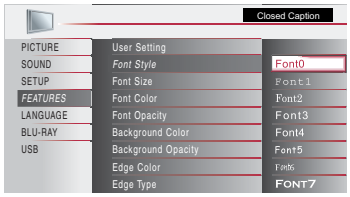
7 Use **[Cursor ▲/▼]** to select an item, then press **[OK]**. Then use **[Cursor ▲/▼]** to select the desired setting and press **[OK]**.



- The setting description for each item is shown on the next page.
- Review your setting choice made on the next page by looking in the upper right corner of the displayed setting box (not all selections show the differences selected).

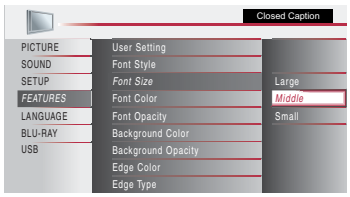
Font Style

Closed Captioning font style can be changed as below.



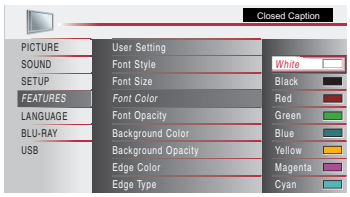
Font Size

Font size of the displayed caption can be switched as below.



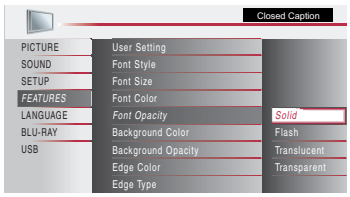
Font Color

Font color of the displayed caption can be switched as below.



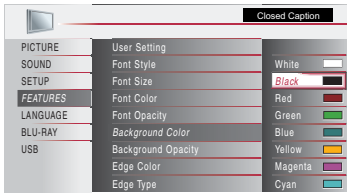
Font Opacity

Font opacity of the displayed caption can be switched as below.



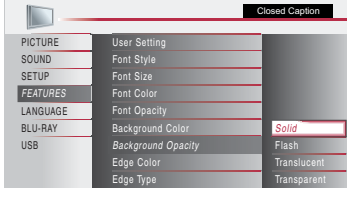
Background Color

Background color of the displayed caption can be switched as below.



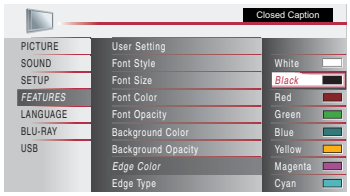
Background Opacity

Background opacity of the displayed caption can be switched as below.



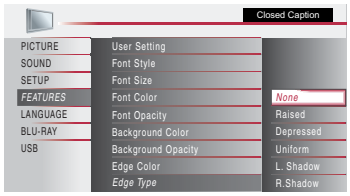
Edge Color

Edge color of the displayed caption can be switched as below.



Edge Type

Edge type of the displayed caption can be switched as below.



8 Press **[MENU / EXIT]** to exit.



Note:

- *To show the closed caption on your TV screen, broadcast signal must contain the closed caption data.*
- *Not all TV programs and commercials have the closed caption or all types of the closed caption.*
- *Captions and texts may not match the TV voice exactly.*
- *Changing channels may delay the closed caption for a few seconds.*
- *Adjusting or muting the volume may delay the closed caption for a few seconds.*
- *Abbreviations, symbols and other grammatical shortcuts may be used in order to keep pace with the on-screen action. This is not a malfunction.*
- *The caption or text characters will not be displayed while the main menu or functions display is shown.*
- *If a black box appears on the TV screen, this means that the closed caption is set to the text mode. To clear the box, select "CC-1", "CC-2", "CC-3", "CC-4" or "Off".*
- *If the unit receives poor quality television signals, the captions may contain errors, or there might be no captions at all. Some possible causes of poor quality signals are:*
 - Automobile ignition noise
 - Electric motor noise
 - Weak signal reception
 - Multiplex signal reception (ghosts or screen flutter)
- *The unit retains the closed caption setting if the power fails.*
- *Closed caption will not be displayed when you are using an HDMI connection.*
- *When the unit receives special effects playback signal (i.e., Search, Slow and Still) from a VCR's video output channel (CH3 or CH4), the unit may not display the correct caption or text.*

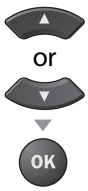
☑ Child Lock

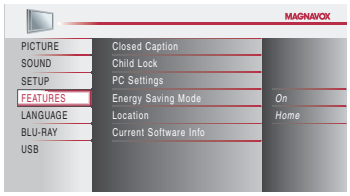
Child lock reads the ratings for programs, then denies access to the programs which exceed the rating level you set. With this function, you can block certain programs inappropriate for children and any channels or external input modes can be invisible.

1 Press **[MENU / EXIT]** to display the main menu.

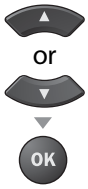


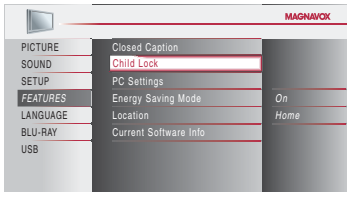
2 Use **[Cursor ▲/▼]** to select "FEATURES", then press **[OK]**.



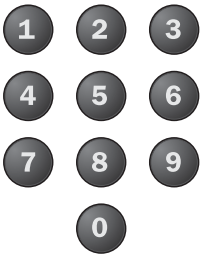


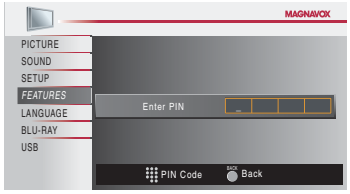
3 Use **[Cursor ▲/▼]** to select "Child Lock", then press **[OK]**.





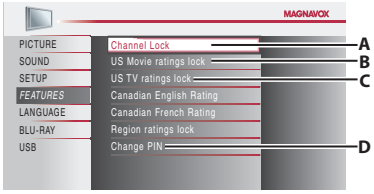
4 Use **[the Number buttons]** to enter the 4-digit numbers for your PIN Code.





- When you have not set up your PIN Code, enter **[0]**, **[0]**, **[0]**, **[0]**.
- When the PIN Code is correct, "Child Lock" menu is displayed.

See the following description for setting each item.



A ··· "A. Channel Lock" ⇨ page 31

B ··· "B. US Movie ratings lock" ⇨ page 31

C ··· "C. US TV ratings lock" ⇨ page 32

D ··· "D. Change PIN" ⇨ page 33

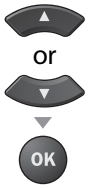
Note:

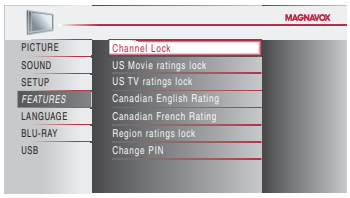
- *When you select a rating and set it to "Block", the higher ratings will be blocked automatically. The lower ratings will be available for viewing.*
- *When you set the highest rating to "View", all ratings turn to "View" automatically.*
- *To block any inappropriate programs, set your limits in "US Movie ratings lock", "US TV ratings lock" and "Region ratings lock".*
- *The child lock setting will be retained after a power failure (except the access code reverts to 0000).*
- *If the rating is blocked, 🔒 will appear.*
- *"Region ratings lock" will be available when the TV receives a digital broadcast using the new rating system.*
- *If the broadcasting signal does not have the region ratings lock information, "Region ratings lock is currently not available." will appear.*
 This message will also appear when you try to access "Region ratings lock" after you have cleared the region ratings lock information, and the new information has not been downloaded since.
- *The Canadian rating systems on this TV are based on CEA-766-A and the Canadian Radio-Television and Telecommunications Commission (CRTC) policy.*

A. Channel Lock

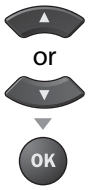
Particular channels or external input modes can be invisible in this function.

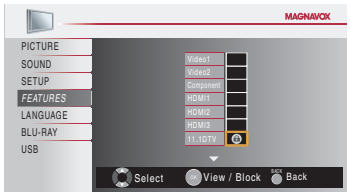
5 Use **[Cursor ▲/▼]** to select "Channel Lock", then press **[OK]**.





6 Use **[Cursor ▲/▼]** to select the desired rating, then press **[OK]** repeatedly to switch between "View" and "Block".





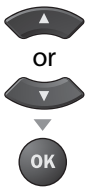
7 Press **[MENU / EXIT]** to exit.

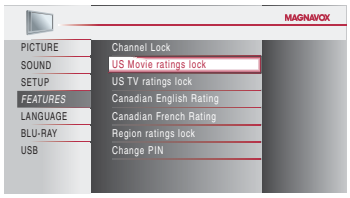


B. US Movie ratings lock

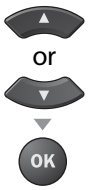
US Movie ratings lock is the rating system created by MPAA (Motion Picture Association of America).

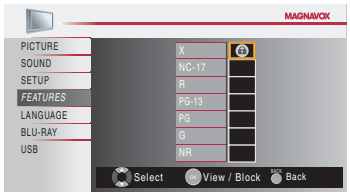
5 Use **[Cursor ▲/▼]** to select "US Movie ratings lock", then press **[OK]**.





6 Use **[Cursor ▲/▼]** to select the desired rating, then press **[OK]** repeatedly to switch between "View" and "Block".





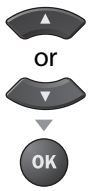
Rating	Category
X	Mature audience only
NC-17	No one under 17 admitted
R	Restricted; under 17 requires accompanying parent or adult guardian
PG-13	Unsuitable for children under 13
PG	Parental guidance suggested
G	General audience
NR	No rating

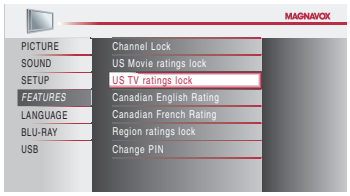
7 Press **[MENU / EXIT]** to exit.



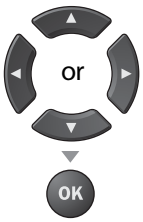
C. US TV ratings lock

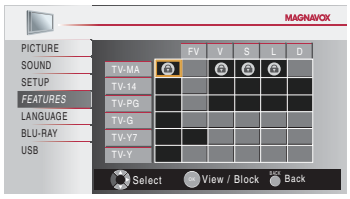
5 Use **[Cursor ▲/▼]** to select "US TV ratings lock", then press **[OK]**.





6 Use **[Cursor ▲/▼/◀/▶]** to select the desired rating, then press **[OK]** repeatedly to switch between "View" and "Block".





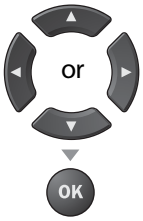
7 Press **[MENU / EXIT]** to exit.

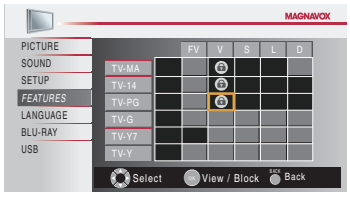


To set the sub ratings

As for TV-MA, TV-14, TV-PG, or TV-Y7, you can further set the sub ratings to block specific elements of programming. To set the sub ratings, follow the step below.

Use **[Cursor ▲/▼/◀/▶]** to select the desired rating, then press **[OK]** repeatedly to switch between "View" and "Block".





Rating	Category	
TV-MA	Mature audience only	**higher**
TV-14	Unsuitable for children under 14	
TV-PG	Parental guidance suggested	
TV-G	General audience	
TV-Y7	Appropriate for all children 7 and older	
TV-Y	Appropriate for all children	**lower**

Sub Rating	Category	Rating
FV	Fantasy Violence	TV-Y7
V	Violence	TV-PG TV-14 TV-MA
S	Sexual Situation	
L	Coarse Language	
D	Suggestive Dialogue	TV-PG, TV-14

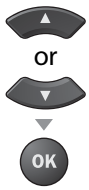
Note:

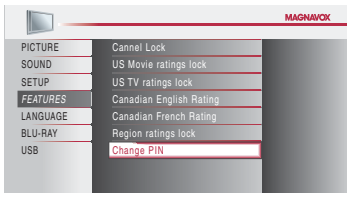
- *Blocked sub rating will appear beside the main rating category in "US TV ratings lock" menu.*
- *You cannot block a sub rating (D, L, S or V) if the main rating is set to "View".*
- *Changing the category to "Block" or "View" automatically changes all its sub ratings to the same ("Block" or "View").*

D. Change PIN

Although the default code (0000) is supplied with the TV, you can set your own PIN Code.

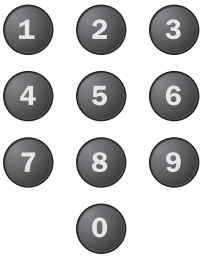
5 Use **[Cursor ▲/▼]** to select "Change Pin", then press **[OK]**.

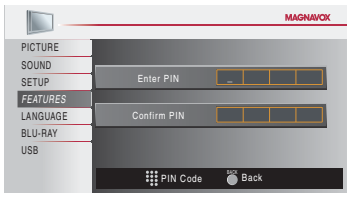




6 Press **[the Number buttons]** to enter the new 4-digit PIN Code.

- Enter PIN Code again in "Confirm Pin" entry field.





7 Press **[MENU / EXIT]** to exit.



Note:

- *Make sure new PIN Code and confirm PIN Code must be exactly the same. If they are different, the space is cleared for reentering.*
- *Your PIN Code will be erased and return to the default (0000) when a power failure occurs.*
 If you forget the PIN Code, unplug the AC power cord for 10 seconds to restore the PIN Code to 0000.

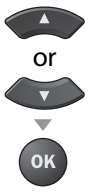
☑ PC Settings

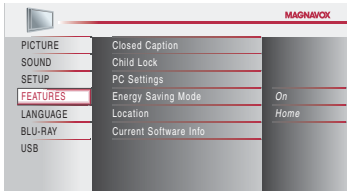
This function lets you adjust the PC screen position during PC input through the HDMI 1 Input jack.

1 Press **[MENU / EXIT]** to display the main menu.

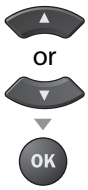


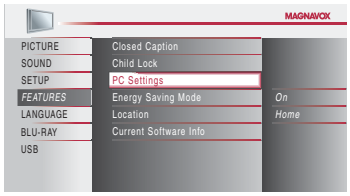
2 Use **[Cursor ▲/▼]** to select “FEATURES”, then press **[OK]**.



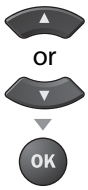


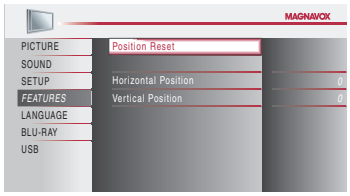
3 Use **[Cursor ▲/▼]** to select “PC Settings”, then press **[OK]**.





4 Use **[Cursor ▲/▼]** to select the setting you want to adjust, then press **[OK]**.

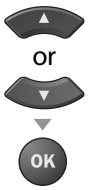


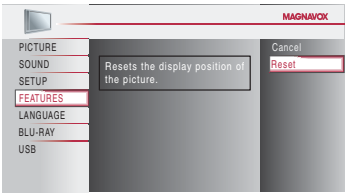


5 Adjust the setting.

Position Reset

Use **[Cursor ▲/▼]** to select “Reset”, then press **[OK]**.





- The horizontal/vertical position of the PC screen are automatically adjusted.

Horizontal Position, Vertical Position

Use **[Cursor ◀/▶]** to adjust.

	Cursor ◀	Cursor ▶
Horizontal Position 	to move PC screen left	to move PC screen right
Vertical Position 	to move PC screen up	to move PC screen down

6 Press **[MENU / EXIT]** to exit.



Note:

- *You may not obtain an appropriate screen with “Position Reset” for some signals. In this case, adjust the settings manually.*

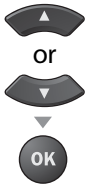
☑ Energy Saving Mode

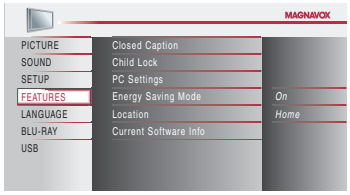
You can set whether the power consumption is saved or not.

1 Press **[MENU / EXIT]** to display the main menu.

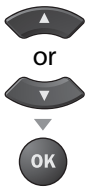


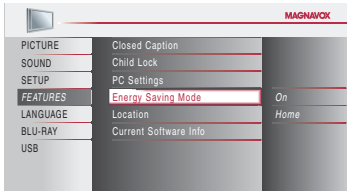
2 Use **[Cursor ▲/▼]** to select "FEATURES", then press **[OK]**.



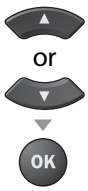


3 Use **[Cursor ▲/▼]** to select "Energy Saving Mode", then press **[OK]**.





4 Use **[Cursor ▲/▼]** to select the desired mode, then press **[OK]**.





On	Select if you want to reduce the power consumption.
Off	The power consumption may possibly exceed the limited requirement of the ENERGY STAR® qualification.

5 Press **[MENU / EXIT]** to exit.



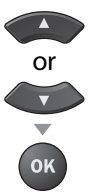
☑ Location

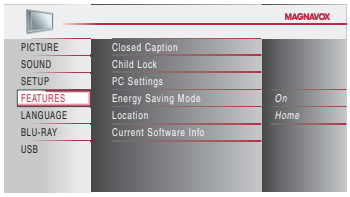
When you select "Retail", the power consumption may possibly exceed the limited requirement of the ENERGY STAR® qualification.

1 Press **[MENU / EXIT]** to display the main menu.

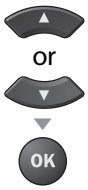


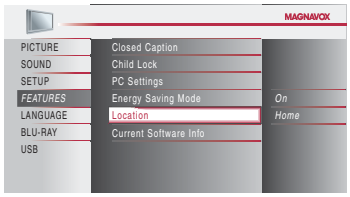
2 Use **[Cursor ▲/▼]** to select "FEATURES", then press **[OK]**.



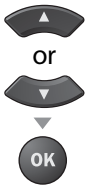


3 Use **[Cursor ▲/▼]** to select "Location", then press **[OK]**.





4 Use **[Cursor ▲/▼]** to select the desired location, then press **[OK]**.





5 Press **[MENU / EXIT]** to exit.



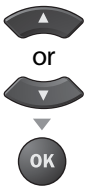
☑ Current Software Info

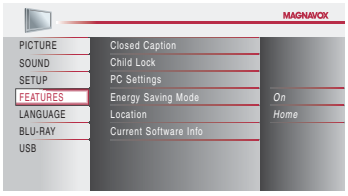
This function shows what version of the software currently used.

1 Press **[MENU / EXIT]** to display the main menu.

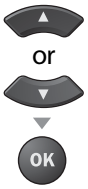


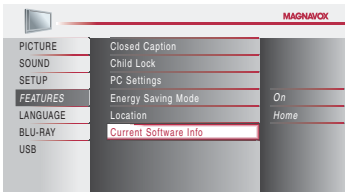
2 Use **[Cursor ▲/▼]** to select “FEATURES”, then press **[OK]**.



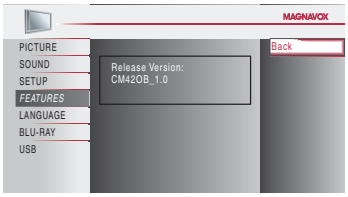


3 Use **[Cursor ▲/▼]** to select “Current Software Info”, then press **[OK]**.





4 Confirm the version of the software currently used.



5 Press **[MENU / EXIT]** to exit.



☑ JPEG/MP3 Playback

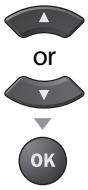
This unit can play JPEG and MP3 files. Use the USB flash memory contains those files.

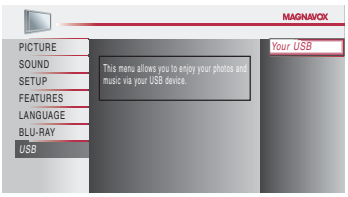
1 Insert the USB flash memory to the USB terminal of this unit.



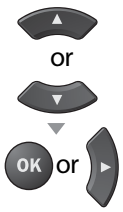
- The main menu appears automatically.

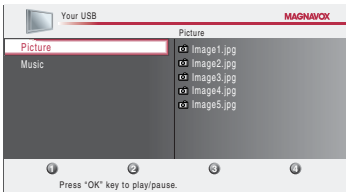
2 Use **[Cursor ▲/▼]** to select “USB” and press **[OK]**. The highlight will move to the name of your USB flash memory, then press **[OK]** again.





3 Use **[Cursor ▲/▼]** to select “Picture” or “Music”, and then press **[OK]** or **[Cursor ▶]**.





Note:

It is recommended that files to be played back in this unit are recorded under the following specifications:

<MP3>

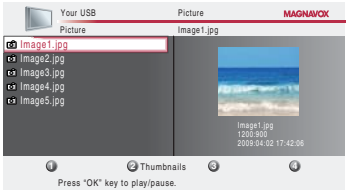
- *Sampling frequency : 32 kHz or 44.1 kHz or 48 kHz*
- *Constant bit rate : 32 kbps - 320 kbps*

<JPEG>

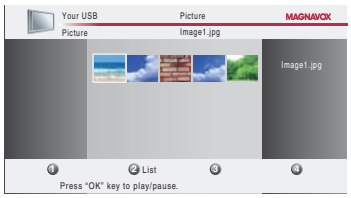
- *Upper limit : 24 Mpixel*

[Picture]

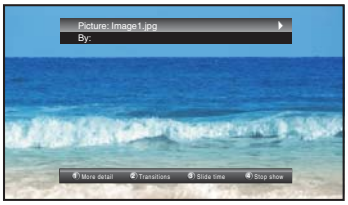
Use **[Cursor ▲/▼]** to select the desired file, and then press **[OK]** or **[Cursor ▶]**.



- To switch a "List" or a "Thumbnails", press **[2]** by **[the number button]**.



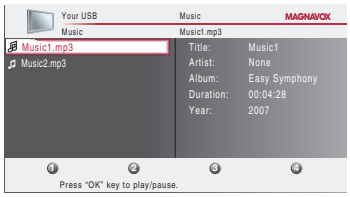
- The unit goes to the slide show automatically. To pause/begin the slide show, press **[OK]**.
- You can use **[the number buttons]** (between **[1]** and **[4]**) to see the file detail (①) or change the following settings (②~④).



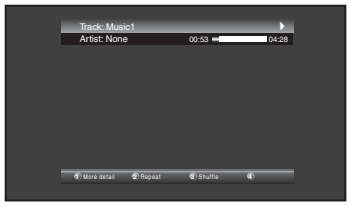
Item	Detail
① **More detail**	Press **[1]** to display file details below. "Name", "Album", "Date", "Size" and "Next". Press **[1]** again to disappear file details.
④ **Start show**	Press **[4]** or **[OK]** to start the slide show. While the slide show is on, the following setting will be displayed.
② **Transitions**	Press **[2]**, then use **[Cursor ▲/▼]** to select the way of the transition mode choosing from; "Dissolve", "Wipe right", "Wipe left", "Wipe up", "Wipe down", "Box in" and "Box out".
③ **Slide time**	Press **[2]**, then use **[Cursor ▲/▼]** to change the display time choosing from; "Short", "Medium" and "Long".
④ **Stop show**	Press **[4]** or **[OK]** to stop the slide show. While the slide show is off, the following setting will be displayed.
② **Rotate**	Every press on **[2]** will turn the picture clockwise by 90 degrees.
③ **Zoom**	Press **[3]**, then use **[Cursor ▲/▼]** to select the zoom factor (1x, 2x or 4x). Press **[OK]** to set the zoom factor.

[Music]

Use **[Cursor ▲/▼]** to select the desired file, and then press **[OK]** or **[Cursor ▶]**.



- Playback will begin from the file you choose. To pause/begin the playback, press **[OK]**.
- You can use **[the number buttons]** (between **[1]** and **[3]**) to see the file detail (①) or change the following settings (② or ③).



Item	Detail
① **More detail**	Press **[1]** to display file details below. "Title", "Artist", "Album", "Duration" and "Year". Press **[1]** again to disappear file details.
② **Repeat**	Press **[2]** to play back the desired file repeatedly. Press **[2]** to play back the all files in the folder repeatedly. To cancel the repeat playback, press **[2]** until "(1)" or "(A)" disappears.
③ **Shuffle**	Press **[3]** to play back the music randomly. To return to the normal playback, press **[3]** again.

4 Press **[MENU / EXIT]** to exit.



Note:

- *To go back to the previous screen (except when the "List" is displayed), press **[Cursor ◀]**.*
- *The USB flash memory is not supplied with this unit.*
- *We do not guarantee the all USB flash memory can be supported on this unit.*
- *Be sure to keep a back up copy of the original files on your device before you play them back on this unit. We have no responsibilities for damage or loss of your stored data.*
- *When you ready to remove a USB flash memory, at first turn off the unit to avoid any damage for your data and the unit.*

BLU-RAY Functions

☑ Playable Media

Media Type	BD-video	DVD-video	DVD-RW	DVD-R	DVD+RW	DVD+R	audio CD	CD-RW	CD-R	DTS-CD
Logo										-
Recorded Signal	MPEG2, MPEG-4 AVC, SMTPE VC-1	MPEG2					CD-DA			digital audio
Media Size	5 inches (12 cm)									

☑ Unplayable Media

NEVER play back the following discs. Otherwise, malfunction may result!

3 inches (8 cm) disc, BD with region codes other than A, BD-RE (Ver. 1.0), BD-R (Ver. 1.2, HTL 4x or LTH 2x), BD-ROM for personal computers, BD-RE/-R with MP3 or JPEG files, Total Hi Def, BD-DVD combination, HD DVD, DVD with region codes other than 1 or ALL, DVD-RAM, DVD-ROM for personal computers, DVD-RW/-R/+RW/+R with MP3 or JPEG files, DVD-audio, CD-I, Photo CD, Video CD, CDV, CD-G, CD-ROM for personal computers, CD-RW/-R with MP3 or JPEG files including Kodak Picture CD, the discs with labels, scratches, stains, blemishes, etc.

On the following disc, the sound MAY NOT be heard.

super audio CD

Any other discs without compatibility indications

Note:

- *Unfinalized discs cannot be played back.*
- *For DVD-RW/R, discs recorded in the VR (video recording) format cannot be played back. Only the finalized video format discs can be played back.*
- *Some discs cannot be played back because of incompatible recording conditions, characteristics of the recorder or special properties of discs.*
- *Only the sound recorded on the normal CD layer can be delivered. The sound recorded on the high density super audio CD layer cannot be delivered.*
- *Do not use a single CD adaptor which makes 3 inches (8 cm) to 5 inches (12 cm) disc.*
- *You can play back discs with the marks listed in "Playable Media". If you use non-standardized discs, this unit may not play them back or the sound and video quality will be compromised.*

Region Codes

This unit has been designed to play back BD-video with region "A" and DVD-video with region "1" or "ALL". You cannot play back BD-video or DVD-video that are labeled for other regions. Look for the symbols on the right on your BD-video or DVD-video.
If these region symbols do not appear on your BD-video or DVD-video, you cannot play back the disc in this unit.

The letter or number inside the globe refers to region of the world.

A BD-video or DVD-video labeled for a specific region can only be played back in the unit with the same region code.

BD-video



DVD-video





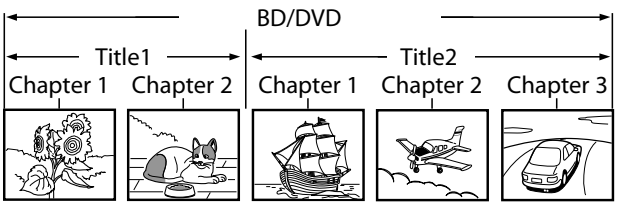
Color Systems

BD-video and DVD-video are recorded in different color systems throughout the world. The most common color system is NTSC (which is used primarily in the United States and Canada).

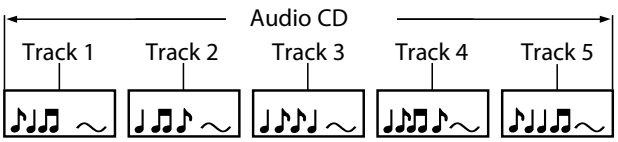
This unit uses NTSC, so the disc you play back must be recorded in the NTSC system. You cannot play back the disc recorded in other color systems.

Structure of Disc Contents

The contents of BD/DVD are generally divided into titles. Titles may be further subdivided into chapters.



Audio CD are divided into tracks.



These operations are accessible by remote control. Some may also be accessible by controls on the main unit.

☑ Playback

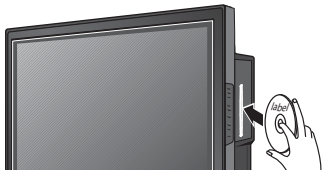
Before you begin:
Turn on the amplifier and any other equipment which is connected to this unit.
Make sure the external audio receiver (not included) are set to the correct channel.

1 Press **[POWER ⏻]** to turn on the unit.

POWER



2 Insert a disc with label facing forward.



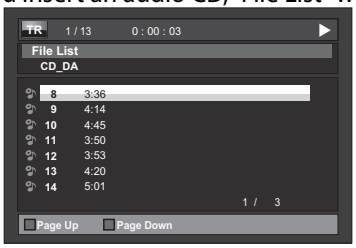
- In case the DVD was recorded on both sides, make sure the label of the side you want to play back is facing forward.

3 The unit switches to the BLU-RAY mode when the unit was in TV mode and detects the type of disc. (BD, DVD or CD) Then starts playback automatically.

e.g.) BD



- When you insert an audio CD, "File List" will appear.



- Press **[PLAY ▶]** if the unit does not go to the BLU-RAY mode or the playback does not start automatically.

4 Press **[STOP ■]** to stop playback temporarily.

STOP



- If playback remains stopped for 20 minutes, the unit will turn itself off automatically when "Auto Power Off" is set to "On".

5 Press **[EJECT ⏏]** to eject the disc.

EJECT



Note:

- *" ⃠ " may appear at the top-right on the TV screen when the operation is prohibited by the disc or this unit.*
- *Some BD/DVD may start playback from title 2 or 3 due to specific programs.*
- *During the playback of a 2-layered disc, pictures may stop for a moment. This happens while the 1st layer is being switched to the 2nd layer. This is not a malfunction.*
- *When you cannot remove the disc, you may try either following operations.*
 *- Press and hold **[EJECT ⏏]** on the unit for more than 5 seconds.*
 *- Unplug the AC power cord and plug it in again, then press **[EJECT ⏏]**.*
 It will take about 10 seconds to eject the disc, while that the unit will not respond to any key commands.

☑ Using the Title Menu, Disc Menu / Pop-up Menu

BD DVD

Many of BD-video and DVD-video discs contain title menu (BD-video / DVD-video), disc menu (DVD-video) or pop-up menu (BD-video) which guides you through the available functions in the disc.
The contents of the menus may differ depending on the discs.

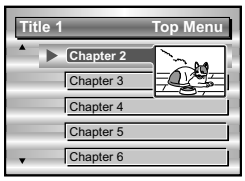
Title menu (BD-video / DVD-video)

1 Press **[TOP MENU]**.

TOP MENU

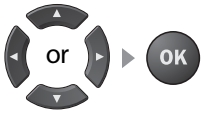


e.g.) Top Menu



- The title menu will appear.

2 Use **[Cursor ▲ / ▼ / ◀ / ▶]** to select an item, then press **[OK]**.



3 Press **[TOP MENU]** to exit.

TOP MENU



e.g.) Disc Menu



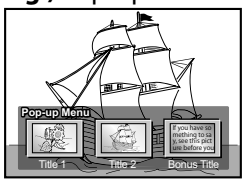
Pop-up menu (BD-video) / Disc menu (DVD-video)

1 Press **[POP MENU]**.

POP MENU

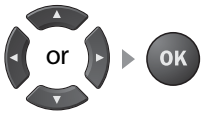


e.g.) Pop-up Menu



- The disc menu will appear when DVD-video is inserted.
- For BD-video, this is a special feature available for some BD-videos. When you press **[POP MENU]**, a menu pops out on the TV screen during playback.

2 Use **[Cursor ▲ / ▼ / ◀ / ▶]** to select an item, then press **[OK]**.



3 Press **[POP MENU]** to exit.

POP MENU



Note:

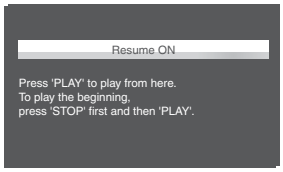
- *Menu operations may vary depending on the disc. Refer to the manual accompanying the disc for more details.*

☑ Resume Playback

BD DVD

1 Press **[STOP ■]** during playback.





- Resume message will appear on the TV screen.

2 Press **[PLAY ▶]**.



- Playback will resume from the point at which playback was stopped.

Note:

- *To cancel resume, press **[STOP ■]** one more time in the stop mode. On some discs, **[STOP ■]** will not work while the resume message appears. Please wait until the message disappears.*
- *The resume information will be kept even when the unit is turned off. However, ejecting the disc will cancel the resume feature. Playback will start at the beginning the next time you insert the disc.*

☑ Fast Forward / Fast Reverse

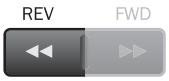
BD DVD

1 During playback, press **[FWD ▶▶]** repeatedly for fast forward.





During playback, press **[REV ◀◀]** repeatedly for fast reverse.





- Every time you press **[FWD ▶▶]** or **[REV ◀◀]**, the playback speed will change.

2 Press **[PLAY ▶]** to return to normal playback.



Note:

- *For BD, the approximate speed for the fast forward is 1 (1.3x), 2 (10x), 3 (30x), 4 (70x), and 5 (200x). And for the fast reverse, it is 1 (2x), 2 (10x), 3 (30x), 4 (70x), and 5 (200x).*
- *For DVD, the approximate speed for the fast forward or reverse playback is 1 (2x), 2 (8x), 3 (20x), 4 (50x), and 5 (100x).*
- *For audio CD, the approximate speed is 1 (2x), 2 (8x), and 3 (30x).*
- *For audio CD, fast forward / fast reverse search between different tracks are not available during program and random playback.*

☑ Slow Forward

BD DVD

1 During playback, press **[PAUSE ❚❚]**, then press **[FWD ▶▶]**.





- Every time you press **[FWD ▶▶]**, playback speed will change.

2 Press **[PLAY ▶]** to return to normal playback.



Note:

- *The approximate speed for the slow forward playback is 1 (1/16x), 2 (1/8x), 3 (1/2x).*
- *Only slow forward is available.*
- *Set "Still Mode" setting to "Field" in "Video" menu if pictures in the slow forward playback mode are blurred. (Refer to "Still Mode" on page 50.)*

☑ Paused / Step-by-step Playback

1 Press **[PAUSE ❚❚]** during playback.





- Playback will be paused and sound will be muted.

2 Press **[PLAY ▶]** to return to normal playback.



BD DVD

1 **In pause mode**, press **[PAUSE ❚❚]** repeatedly.



- Every time you press **[PAUSE ❚❚]**, playback will advance one step at a time.

2 Press **[PLAY ▶]** to return to normal playback.



Note:

- *Set "Still Mode" to "Field" in the "Video" menu if pictures in the step-by-step playback are blurred. (Refer to page 50.)*
- *Only step by step forward is available.*

☑ Repeat Playback

Repeats playback particular chapter, title or track during playback. You can also repeat playback between A and B on a disc.

1 During playback, press **[REPEAT].**

REPEAT



2 Press **[REPEAT]** to change the repeat mode.

BD **DVD**

Off (repeat **Off**)
Chapter (**current chapter** repeat)
Title (**current title** repeat)

CD

Off (repeat **Off**)
Track (**current track** repeat)
All (**entire disc** repeat)

3 To cancel repeat playback, press **[REPEAT]** repeatedly until "Off" appears.

REPEAT

A-B repeat

1 During playback, press **[A-B]** at your desired starting point (A).

A-B



2 Press **[A-B]** once again at your desired ending point (B).

A-B



- Point B should be set in the same chapter, title or track as point A.
- Within a few seconds, the section A-B will begin to play back repeatedly.

3 To cancel A-B repeat, press **[A-B]** repeatedly until "Off" appears.

A-B

Note:

- *Repeat setting (except "All") will be cleared when moving to another title or chapter, track.*
- *Repeat playback or A-B repeat may not available with some discs.*
- *A-B repeat does not function during chapter, title, track or all repeat playback.*
- *To cancel point A, press **[CLEAR]** at step 1 in "A-B Repeat".*
- *Stopping playback will cancel "A-B Repeat".*

☑ Rapid Playback

BD **DVD**

This function plays back approximately at 1.3 times the normal playback while keeping the sound output. This function is available only on discs recorded in the Dolby Digital format.

1 During playback, press **[MODE]** repeatedly until " " appears.

MODE



2 Press **[OK]** or **[Cursor ◄ / ►]** to switch "♪♪" (1.3x), or "Off".

or or OK



Off	Plays back in normal speed.
♪♪	Plays back approximately at 1.3 times of normal playback.

3 Press **[PLAY ►]** to return to normal playback.

PLAY

Note:

- *Virtual surround does not work during this function.*
- *This function may not work at some points on a disc.*
- *During this function, 2ch LPCM signal will be output from Digital Audio Output jack.*

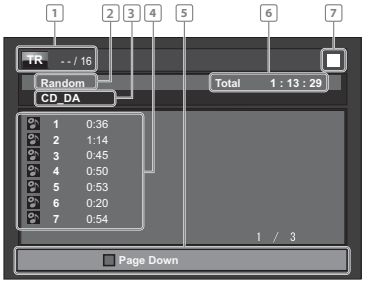
☑ Random Playback

CD

This function shuffles the playing order of tracks instead of playback in the sequence.

1 **In stop mode**, press **[MODE]** repeatedly until "Random" menu appears.

STOP MODE



1 **audio CD** Track information
2 **"Random"** will be displayed.
3 **"CD-DA"** will be displayed.
4 **File list** File list in the original order
5 **Operation guide** Press **[RED]** to go to the previous page. Press **[GREEN]** to go to the next page.
6 **Total playback time of all tracks**
7 **Playback status**

2 Press **[PLAY ►]** to start random playback.

PLAY

3 To exit from the random playback mode, press **[STOP ■]** first, then press **[MODE]** repeatedly until "File List" appears.

STOP MODE

Note:

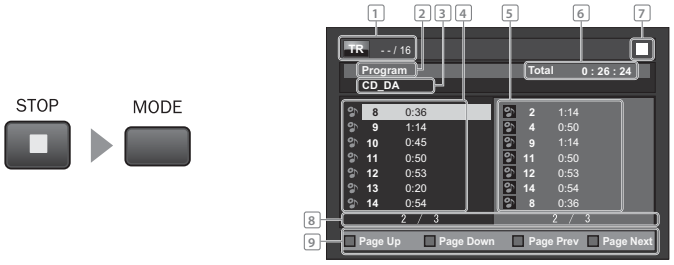
- *During the random playback, press **[STOP ■]** once to set the resume point, and then press **[PLAY ►]** to resume random playback from where **[STOP ■]** was pressed (audio CD).*
- *To repeat the current track in the random mode, follow the steps 1 and 2 in "Repeat Playback" on page 41 and select " Track".*
- *To repeat the entire random selections, follow the steps 1 and 2 in "Repeat Playback" on page 41 and select " All".*
- *Playback from a desired track is not available during random playback.*
- *Press **[BACK]** to switch to the program playback mode.*

☑ Programmed Playback

CD

You may determine the order in which tracks will play back.

1 **In stop mode**, press **[MODE]** repeatedly until "Program" menu appears.



1 **audio CD** Track information

2 **"Program"** will be displayed.

3 **"CD-DA"** will be displayed.

4 **File list** File list in the original order

5 **Programmed list** File list in the programmed order

6 **Cumulative playback time of all tracks in the programmed list**

7 **Playback status**

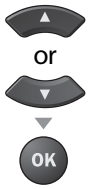
8 **Current page / Total page number**

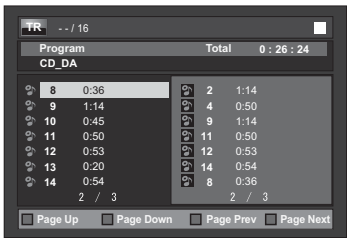
9 **Operation guide** Press **[RED]** to go to the previous page in the file list.
Press **[GREEN]** to go to the next page in the file list.
Press **[BLUE]** to go to the previous page in the programmed list.
Press **[YELLOW]** to go to the next page in the programmed list.

- The programmed tracks are displayed in the right hand screen.
- Press **[CLEAR]** to erase the last track of the program.
- Use **[Cursor ▲ / ▼]** to select "All Clear" at the bottom of the list to erase all the tracks in the program.

2 Use **[Cursor ▲ / ▼]** to select a desired track, then press **[OK]** to store.

- Additional tracks may be on other screens. Use **[Cursor ▲ / ▼]** to go on to the next / previous pages.
- Repeat this step until you have selected all the tracks you wish to play back in the program.

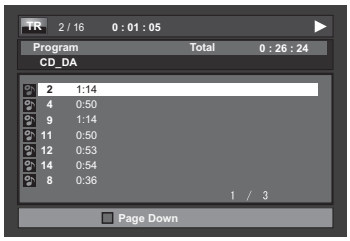




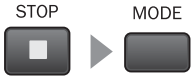
- Up to 99 tracks can be ordered.
- If 8 or more tracks were in a program, use **[BLUE/YELLOW]** to see all the tracks.

3 Press **[PLAY ►]** to start programmed playback.





4 To exit from the programmed playback mode, press **[STOP ■]** first, then press **[MODE]** repeatedly until "File List" appears.



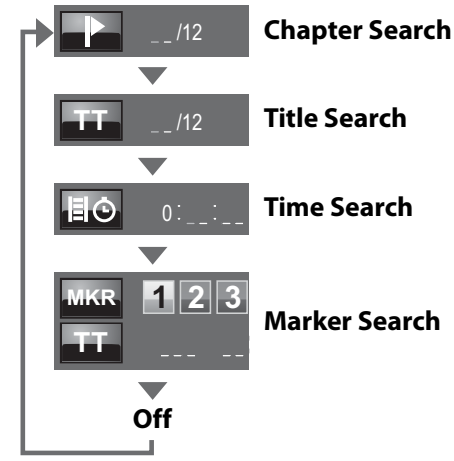
Note:

- *While a program is being played back, **[STOP ■]** works as follows:*
 - *Pressing **[STOP ■]** once: The track will be in the resume mode. Next time you press **[PLAY ►]**, the playback will resume from the point where it is stopped in the programmed playback.*
 - *During program playback, press **[STOP ■]** twice to display the program screen. To go back to the normal program playback, press **[BACK]** to exit from the program screen, then press **[PLAY ►]**.*
- *To repeat the current track in the program, press **[REPEAT]** repeatedly until " Track" appears during playback.*
- *To repeat the entire program, press **[REPEAT]** repeatedly until "All" appears during playback.*
- *The program will be cleared when;*
 - *the unit is turned into the standby mode.*
 - *the media mode is switched to the TV mode.*
 - *the disc is removed.*
- *You cannot use **[the Number buttons]** to select another track during programmed playback. Use **[RED/GREEN]** to select other tracks in the program.*
- *You cannot combine random playback with programmed playback.*
- *You cannot alter a programmed order during playback.*
- *You can start programmed playback only while in "Program" menu.*

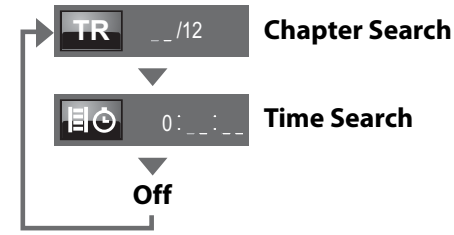
☑ Search Functions

By using [SEARCH MODE], you can select the following search modes.

BD DVD



CD

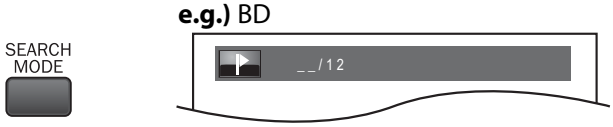


Chapter / Title / Track Search

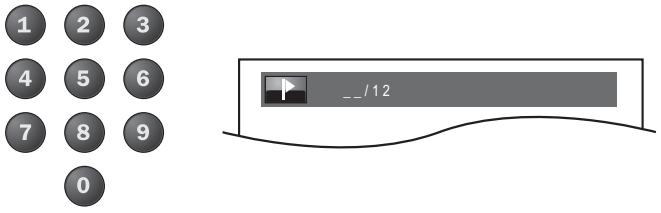
You can select chapters, titles or tracks on the disc.

1 During playback, press **[SEARCH MODE]** repeatedly until "▶" / "TR" appears.
- If you want to perform the title search, press **[SEARCH MODE]** repeatedly until "TT" appears.

e.g.) BD



2 Press **[the Number buttons]** to select your desired chapter, title or track within 30 seconds.



To play back a single-digit chapter, title or track when there are more than 10 chapters, titles or tracks, press **[OK]** after entering the chapter, title or track number.

3 Playback will start automatically from the chapter, title or track you selected.

Note:
- *For BD/DVD, chapter search cannot be performed in the stop mode. For BD, it also cannot be performed when the unit has kept the resume information.*
- *The total number of chapters / titles / tracks in your disc; with less than 10 chapters / titles / tracks, press the chapter / title / track number directly. To play a double-digit chapter / title / track, press the chapter / title / track number.*
- *Track search is not available for programmed or random playback.*

Time Search

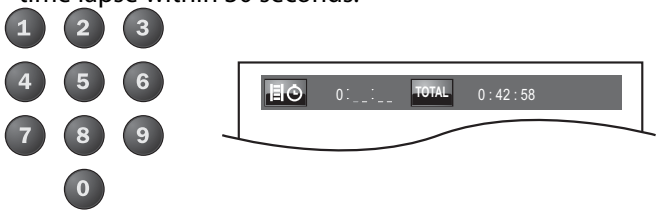
You can select the desired time which the disc is played back from.

1 During playback, press **[SEARCH MODE]** repeatedly until "⏲" appears.

e.g.) BD



2 Press **[the Number buttons]** to select your desired time lapse within 30 seconds.



3 Playback will start automatically from the time you selected.

Note:
- *When there is no need to enter a number, "0" appears automatically. For example, "0: 0_: _ _" appears in the time search menu if the total time of the title or track is less than 10 minutes.*
- *Press **[CLEAR]** to erase the incorrect input at step 2.*
- *Time search can only be performed during playback or when the unit has kept the resume information (except for BD). It cannot be performed in the stop mode.*

Marker Search

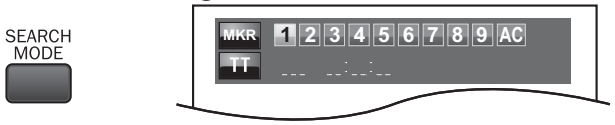
This feature allows you to assign a specific point on a disc to be called back later.

BD DVD

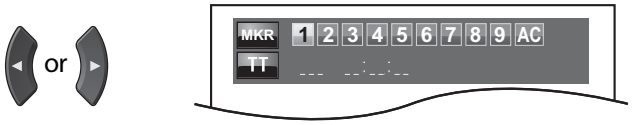
To set a marker

1 During playback, press **[SEARCH MODE]** repeatedly until "MKR" appears.

e.g.) BD

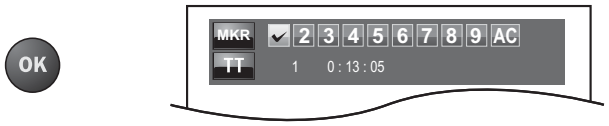


2 Use **[Cursor ◄ / ►]** to select an available marker within 30 seconds.



3 When the playback reaches the point at which you want to set a marker, press **[OK]**.

- Marker is now set.



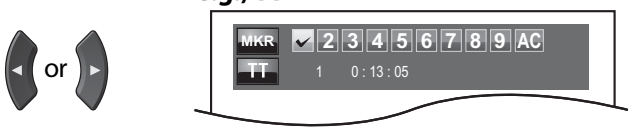
4 Press **[BACK]** to exit.



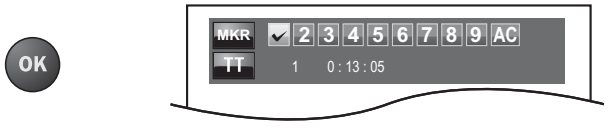
To return to the marker later

1 Repeat step 1 in "To set a marker". Use **[Cursor ◄ / ►]** to select the desired marker.

e.g.) BD



2 Press **[OK]** at the desired marker to restart playback from the specific point which you set.



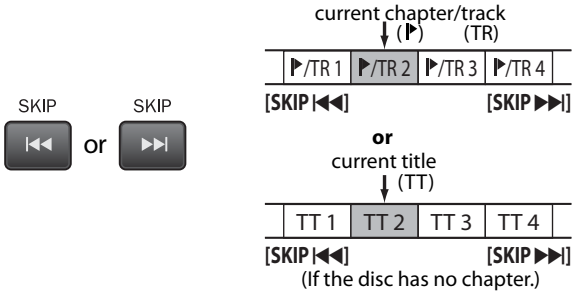
Note:

- *Marker search menu will disappear in about 30 seconds when there is no input.*
- *You can mark up to 9 points.*
- *To clear a marker, select the marker to be cleared, and then press **[CLEAR]**.*
- *Ejecting the disc or turning off the power will erase all markers.*
- *Selecting "AC" at step 3 in the section "To set a marker" will also erase all markers.*
- *For BD, marker search cannot be performed when the unit has kept resume information or the unit is in the stop mode.*

Direct Search

Using [SKIP |◄◄ / ►►|]

1 During playback, press **[SKIP |◄◄ / ►►|]** repeatedly until a desired chapter, title or track will be selected.



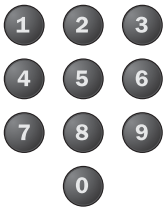
2 Playback will start automatically from the chapter, title or track you selected.

Note:

- ***[SKIP |◄◄ / ►►|]** are not available when playback is stopped.*

Using [the Number buttons]

Press **[the Number buttons]** to select your desired chapter, title or track.



Note:

- *As for the BD-video, how it performs will be strongly determined by the disc, and may not perform as described here.*

☑ On-screen Display

You can check the information about the current disc by pressing [INFO] on the remote control.

1 During playback, press **[INFO]** repeatedly until your desired screen display mode appears.

BD

Title / Chapter information

INFO



- current title number
- current chapter number / total chapters
- current repeat setting appears only when the repeat setting is active
 C: chapter repeat / T: title repeat / A B: A-B repeat
- appears only when multi-angle is available on the BD
- current playback status

INFO

Title information



- total titles
- elapsed time of the current title

INFO



- remaining time of the current title

INFO

disappear

CD

Track information

INFO



- current track number / total tracks
- elapsed time of the current track
- current playback status

INFO

- current repeat setting appears only when the repeat setting is active
 T: track repeat / A: all repeat / A B: A-B repeat



- remaining time of the current track

INFO

Disc information



INFO

- elapsed time of the entire disc
- remaining time of the entire disc



INFO

DVD

Chapter information

INFO



- current chapter number / total chapters
- elapsed time of the current chapter
- current repeat setting appears only when the repeat setting is active
 C: chapter repeat / T: title repeat / A B: A-B repeat
- appears only when multi-angle is available on the DVD
- current playback status

INFO

- remaining time of the current chapter



INFO

Title information

- current title number / total titles
- elapsed time of the current title



INFO

- remaining time of the current title



INFO

Bit rate information

- bit rate indication for the amount of audio and video data currently being read



- layer number appears only when playing a 2-layered disc
 L0: Layer 0 is played back
 L1: Layer 1 is played back

INFO

disappear

☑ Special Settings

Subtitle Language

This unit allows you to select a subtitle language (if available) during BD/ DVD playback.

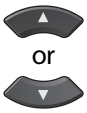
BD

1 During playback, press **[SUBTITLE]** repeatedly to display "Primary Subtitle", "Secondary Subtitle" or "Subtitle Style".

SUBTITLE



2 Use **[Cursor ▲/▼]** repeatedly until your desired subtitle or style.

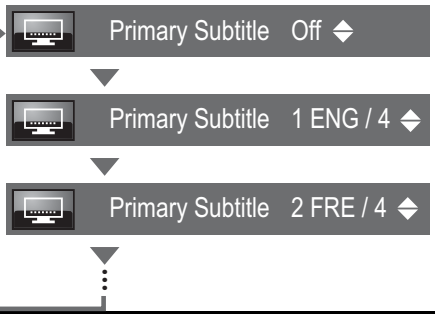


or



• current subtitles language
• subtitles can be varied on the displayed number

e.g.)



3 Press **[SUBTITLE]** to exit.

SUBTITLE



DVD

1 During playback, press **[SUBTITLE]**.

SUBTITLE



2 Use **[Cursor ▲/▼]** repeatedly until your desired subtitle.

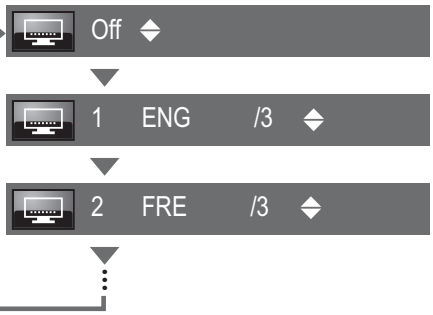


or



• current subtitles language
• subtitles can be varied on the displayed number

e.g.)



3 Press **[SUBTITLE]** to exit.

SUBTITLE



Note:

- *To cancel the subtitle, select "Off" at step 2.*
- *Using **[Cursor ◀/▶]** can also be switched between current subtitle setting and "Off".*
- *If your language is not shown after pressing **[Cursor ▲/▼]** several times, the disc may not have that language. However, some discs allow you to change subtitle languages setting in the disc menu or pop-up menu. (Operation varies depending on the disc, so refer to the manual along with the disc.)*
- *When "Not Available" appears on the TV screen, it means no subtitle is recorded on the scene.*
- *If you choose a language that has 3-letter-language code, the code will be displayed every time you change the subtitle language setting. If you choose any other languages, "---" will be displayed instead. (Refer to page 54.)*
- *Ejecting the disc will cancel your subtitle setting.*
- *If 4-digit language code appears in the subtitle menu, refer to "Language Code List" on page 54.*

BD Audio Mode

There are 2 options for the "BD Audio Mode" setting; either by setting the output to the secondary and interactive audio accompanied by the primary audio or by setting only the primary audio. Depending on the setting of the mode, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS, or DTS-HD output changes between multi LPCM and bitstream.

BD

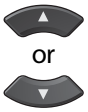
1 **In stop mode**, press **[MODE]** repeatedly until "" appears.

MODE





2 Use **[Cursor ▲/▼]** to select the sound level.



or



Mix Audio Output	If it is available, BD-video's secondary and interactive audio will be output with the primary audio. The secondary audio is the audio for the secondary video (Director's comment etc.) and the interactive audio is the audio for the interactive application (Button click sounds etc.).
HD Audio Output	Only the primary audio will be output.

3 Press **[BACK]** to exit.

BACK



Note:

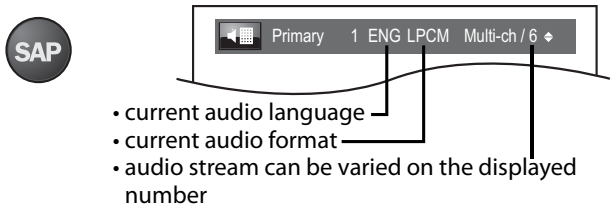
- *In "Mix Audio Output" mode, if there is no secondary and interactive audio, the audio will be output as "HD Audio Output" mode.*

Audio Soundtrack

Some BD and DVD contain multiple audio streams.
Those are often in different audio languages or audio formats.
For BD, available audio varies depending on "BD Audio Mode" setting.
Refer to page 46 for more information.

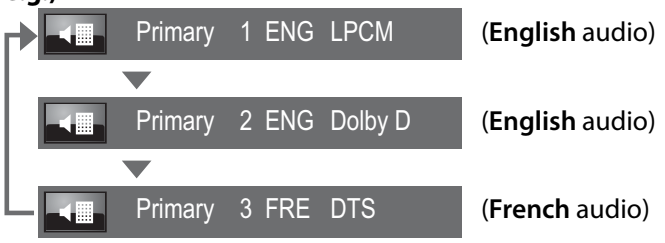
BD

1 During playback, press **[SAP]** repeatedly to display "Primary" or "Secondary".



2 Use [**Cursor ▲/▼**] to select your desired audio stream.

e.g.)

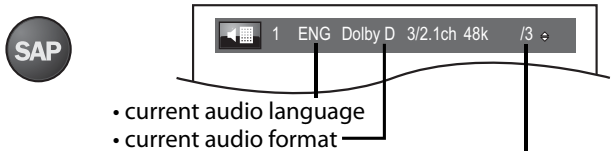


3 Press **[SAP]** repeatedly to exit.



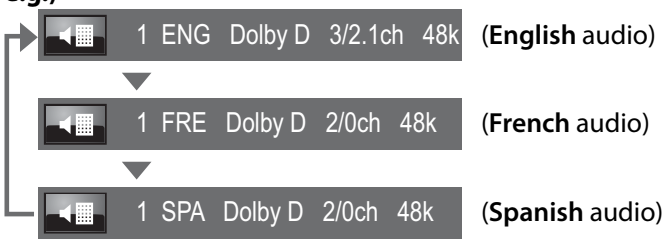
DVD

1 During playback, press **[SAP]** repeatedly until your desired language appears.



2 Use **[Cursor ▲/▼]** to select your desired audio stream.

e.g.)

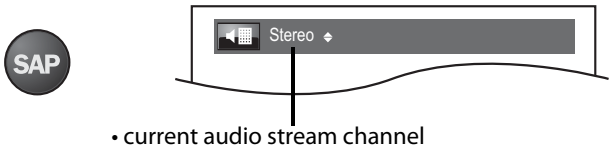


3 Press **[SAP]** repeatedly to exit.

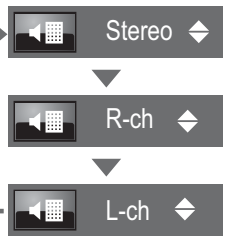


CD

1 During playback, press **[SAP]** repeatedly until the desired sound mode appears.



2 Use [**Cursor ▲/▼**] to select your desired audio stream channel.



3 Press **[SAP]** repeatedly to exit.



Note:

- *The secondary audio will not be output when the secondary video is not displayed or when "BD Audio Mode" is set to "HD Audio Output". (For some BD, secondary audio will be output even when secondary video is off.)*
- *The sound mode cannot be changed during playback of discs not recorded in multiple audio.*
- *Some discs allow changing the audio language setting on the disc menu. (Operation varies depending on the discs. Refer to the manual accompanying the disc.)*
- ***[SAP]** may not work on some discs with multiple audio streams or channels (e.g. DVDs that allow changing audio setting on the disc menu).*
- *If you select a language that has a 3-letter-language code, the code will be displayed every time you change the audio language setting. If you select any other languages, "---" will be displayed instead. (Refer to page 54.)*
- *Audio Language selection cannot be made during rapid playback.*
- *If 4-digit-language code appears in the subtitle menu, refer to page 54.*
- *If the disc has no audio language, "Not Available" will be displayed on the TV screen.*
- *For DTS-CD (5.1 music disc), selecting audio streams or channels is not available.*

Camera Angles

BD DVD

Some BD/DVD may contain scenes which have been shot simultaneously from various angles. You can change the camera angle if "" appears on the screen.

1 During playback, press **[ANGLE]** repeatedly until "" appears.

ANGLE



• angles can be varied on the displayed number.

2 Use **[Cursor ▲/▼]** repeatedly until your desired camera angle appears.

or



3 Press **[BACK]** or **[ANGLE]** to exit.

BACK or ANGLE

Note:

- *If "Angle Icon" is set to "Off" in "Others" menu, "" will not appear. (Refer to page 53.)*

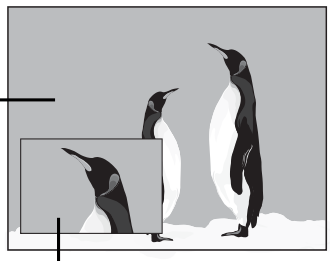
PIP (Bounusview) Setting

BD

Some BD-video have the PIP function which enables you to display the secondary video in the primary video. You can call up the secondary video by pressing [PIP] whenever the scene contains the secondary video.

1 During playback, press **[PIP]**.

PIP



• primary video
• Secondary video

- PIP information will appear.

2 Use **[Cursor ▲/▼]** to select the secondary video you want.

- The secondary video will be displayed and the secondary audio will be output.

3 Press **[BACK]** or **[PIP]** to remove the PIP information.

BACK or PIP

Note:

- *Secondary video can also be called up by pressing **[MODE]**.*
- *The secondary audio will not be output when the secondary audio is set to "Off" or when "BD Audio Mode" is set to "HD Audio Output". Refer to "Audio Soundtrack" on page 47 and "BD Audio Mode" on page 46.*

Virtual Surround

You can enjoy virtual surround on your 2 channel stereo system.

1 During playback, press **[MODE]** repeatedly until "" appears.

MODE



2 Use **[Cursor ▲/▼]** to select the sound level.

or



Off	No surround effect
1	Natural surround effect
2	Stronger surround effect

3 Press **[BACK]** to exit.

BACK

Note:

- *Virtual surround does not function during rapid playback.*
- *For the virtual surround, audio signal will always be 2-channel LPCM.*
- *Turn down the level or select "Off" if the sound is distorted.*

Noise Reduction

DVD

Reduces the noise of the playback picture.

1 During playback, press **[MODE]** repeatedly until "" appears.

MODE



2 Use **[Cursor ◄/►]** to select the sound level.

or



Off	Shows the original picture as recorded.
1	Executes 3D noise reduction which detects and deletes the noise by comparing each picture frames.
2	Executes MPEG noise reduction which reduces the block noise and mosquito noise on the subtitle on movie.
3	Executes both MPEG noise reduction and 3D noise reduction.

3 Press **[BACK]** to exit.

BACK

Note:

- *The setting will remain the same even if the unit is turned to the standby mode.*
- *You cannot adjust the setting during rapid playback.*

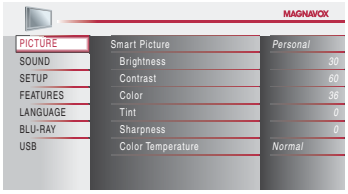
Settings are only effective when the unit is in BLU-RAY mode and any discs should not be played back.

☑ Blu-ray Setup Menu

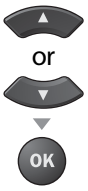
You can change the desired language when playing back the disc.

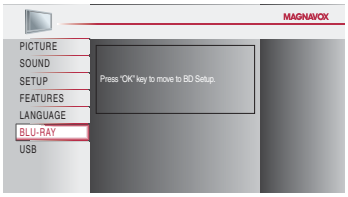
1 Press **[MENU / EXIT]** to display the main menu.





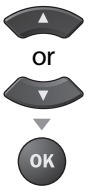
2 Use **[Cursor ▲/▼]** to select "BLU-RAY", then press **[OK]**.

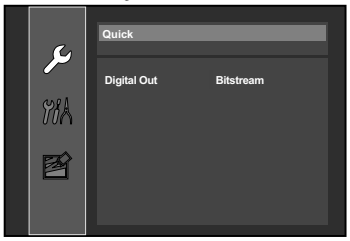




Quick

3 Use **[Cursor ▲/▼]** to select " ", then press **[OK]**.





- The "Quick" menu will appear on the TV screen.

4 Use **[OK]** to select your desired digital output.



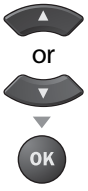
Bitstream	When playing back discs recorded in Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS or DTS-HD, the corresponding core stream (Dolby Digital or DTS) are output.
LPCM	2ch LPCM signal will be output from Digital Audio Out jack.

Custom

☑ Blu-ray Language Setting

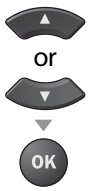
You can change the desired language when playing back the disc.

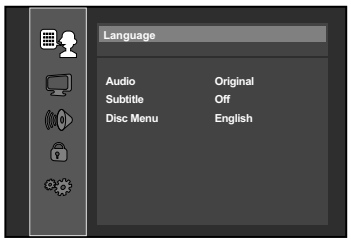
3 Follow steps **1**-**2** above, then use **[Cursor ▲/▼]** to select " ", then press **[OK]**.



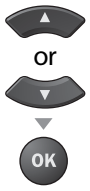


4 Use **[Cursor ▲/▼]** to select " ", then press **[OK]**.





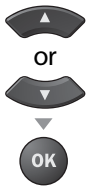
5 Use **[Cursor ▲/▼]** to select the desired item, then press **[OK]**.





Audio *1, *2 (Default: Original)

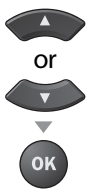
Select the desired audio language.

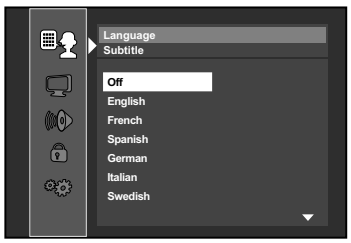




Subtitle *1, *2 (Default: Off)

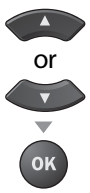
Select the desired subtitle language.





Disc Menu *1 (Default: English)

Select the desired language in Blu-ray menu.





Note:

- *To change the on-screen language, call up "Language" from the main menu and set the desired language. (Refer to "Language Selection" on page 24.)*

*1

- *Language options are not available with some discs.*
- *If "Other" is selected in "Audio", "Subtitle" or "Disc Menu" menu, press 4-digit number to enter the code for the desired language. (Refer to "Language Code List" on page 54.)*
- *Only the languages supported by the disc can be selected.*

*2

- *Language setting for Audio and Subtitle are not available with some discs.*
 *- Press **[SUBTITLE]** to select subtitles available on the BD/DVD.*
 *- Press **[SAP]** to select audio available on the BD/DVD.*
- *If the BD/DVD's default settings for audio and subtitle are the same language, the subtitles may not show unless you turn them on.*

6 Press **[MENU / EXIT]** to exit.



☑ Blu-ray Video Setting

You can change the desired language when playing back the disc.

3 Follow steps **1**-**2** on page 49, then use **[Cursor ▲/▼]** to select " ", then press **[OK]**.



4 Use **[Cursor ▲/▼]** to select " ", then press **[OK]**.

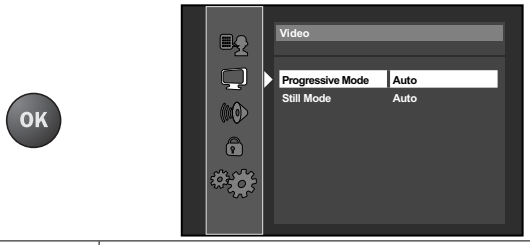


5 Use **[Cursor ▲/▼]** to select the desired item, then press **[OK]**.



Progressive Mode (Default: Auto)

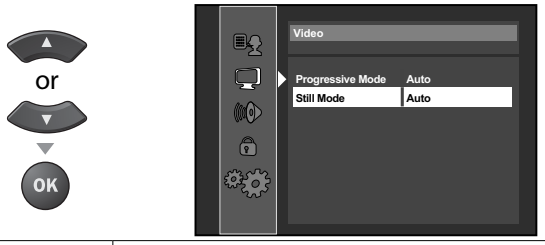
Sets the optimum progressive output for the images in a material stored.



Auto	Detects 24 frame film material (movies) and automatically select appropriate progressive mode.
Video	Suited for playing back vidro material discs (TV shows or animation).

Still Mode (Default: Auto)

Adjusts picture resolution and quality in "Still Mode".



Auto	Automatically selects the best resolution setting ("Frame" or "Field").
Field	Select "Field" when the pictures are distorted. Stabilizes the pictures, although the picture quality may become coarse.
Frame	Select "Frame" when you want to display motionless oictures in high resolution. Improves the picture quality, although it may produce the pictures distorted.

6 Press **[MENU / EXIT]** to exit.



☑ Blu-ray Audio Setting

Choose the appropriate audio settings for your equipment. It only affects during the playback of BD/DVD.

3 Follow steps **1**-**2** on page 49, then use **[Cursor ▲/▼]** to select " ", then press **[OK]**.



4 Use **[Cursor ▲/▼]** to select " ", then press **[OK]**.



5 Use **[Cursor ▲/▼]** to select the desired item, then press **[OK]**.

BD Audio Mode

(Default: Mix Audio Output)

You can select whether to output the primary and secondary audio or only the primary audio.



Mix Audio Output	At the same time, 7 outputs the primary and secondary audio if it is available.
HD Audio Output	Outputs only the primary audio.

Digital Out

(Default: Bitstream)

Set to "Bitstream" when this unit is connected to a Dolby Digital decoder and DTS decoder.

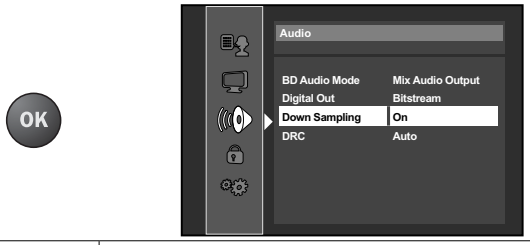


Bitstream	When playing back discs recorded in Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS or DTS-HD, the corresponding core stream (Dolby Digital or DTS) are output.
LPCM	2ch LPCM signal will be output from Digital Audio Out jack.

Down Sampling

(Default: On)

This function is available only on digital outputting of a disc recorded in 96kHz.



On	When outputting in 48kHz.
Off	When outputting the original sound.

Note:

- *When playing back a 96 kHz disc with the copyright protection or when "Virtual Surround" is set to "1" or "2", the sound will be down sampled at 48 kHz even if the "Down Sampling" is set to "Off".*
 (Refer to "Virtual Surround" on page 48.)

DRC (dynamic range control)

(Default: On)

This function is available only on the discs which are recorded in the Dolby Digital format.



Auto	When the discs that are recorded in the Dolby TrueHD format is in playback, this unit detects DRC setting of the disc and set the DRC setting of this unit to "On" or "Off" automatically.
On	Compress the range between soft and loud sounds.
Off	No effects (original sound).

6 Press **[MENU / EXIT]** to exit.



☑ Parental Setting

Parental setting prevents your children from viewing inappropriate materials. (password protected.) Playback will stop if the ratings exceed the levels you set.

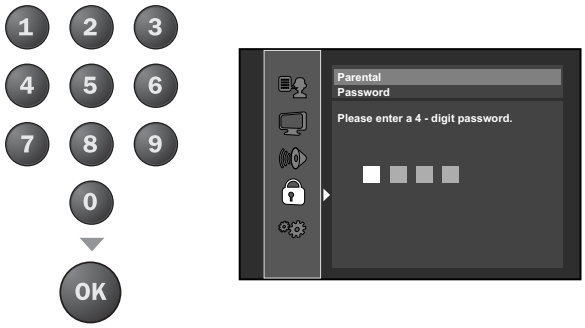
3 Follow steps **1**-**2** on page 49, then use **[Cursor ▲/▼]** to select " ", then press **[OK]**.



4 Use **[Cursor ▲/▼]** to select " ", then press **[OK]**.

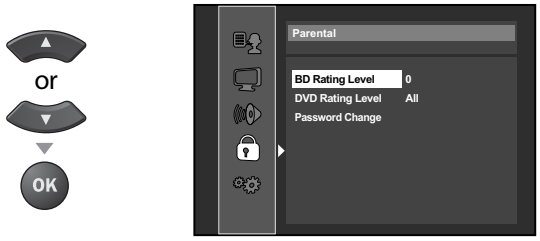


5 Use **[the Number buttons]** to enter the 4-digit numbers (except for the default password 4737) for your password, then press **[OK]**.



- If you have set password already, use **[the Number buttons]** to enter the current 4-digit password.
- If you forget the passwprd, enter **[4]**, **[7]**, **[3]**, **[7]**. The password will be cleared and "BD Rating Level", "DVD Rating Level" will be set to "0", "All" accordingly.

6 Use **[Cursor ▲/▼]** to select the desired item, then press **[OK]**.



BD Rating Level

All	To release the limitation.
Age Setting	To set the age limitation.

- After selecting **Age Setting**, use **[the Number buttons]** to enter the age from 0 – 254. (e.g. for age 15, press **[0]**, **[1]**, **[5]**).

DVD Rating Level

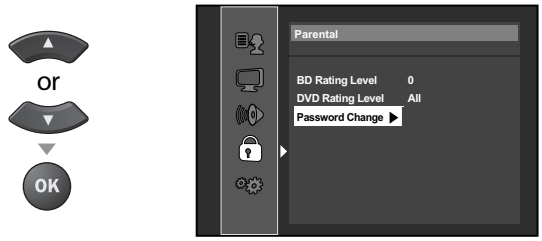
All	Parental Control is inactive; all discs can played back.
8 [Adult]	DVD software of any grades (adult / general / children) can be played back.
7 [NC-17]	No one under 18 admitted.
6 [R]	Restricted; under 18 requires accompanying parent or adult guardian.
5 [PGR]	Parental guidance recommended.
4 [PG-13]	Unsuitable for children under 13.
3 [PG]	Parental guidance suggested.
2 [G]	General audience.
1 [Kid Safe]	Suitable for children.

7 Press **[MENU / EXIT]** to exit.

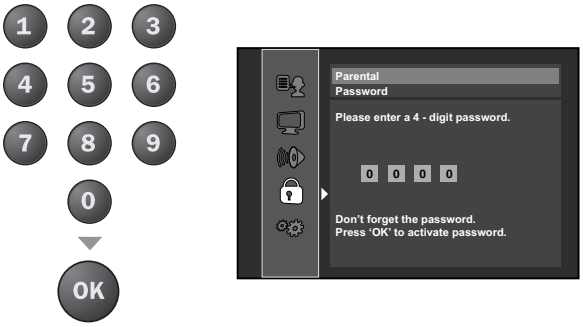


To change the Password

6 Follow steps **1**-**2** on page 49 and **3**-**5** on page 52. Use **[Cursor ▲/▼]** to select "Password Change", then press **[OK]**.



7 Use **[the Number buttons]** to enter the new 4-digit password.



> ***Note:***
> - *BD-video/DVD-video may not respond to parental lock settings. Make sure this function works with your BD-video/ DVD-video.*
> - *Record the password in case you forget it.*
> - *If you forget the passwprd, enter **[4]**, **[7]**, **[3]**, **[7]**. The password will be cleared and "BD Rating Level", "DVD Rating Level" will be set to "0", "All" accordingly.*
> - *A power failure will not erase your password.*

8 Press **[MENU / EXIT]** to exit.



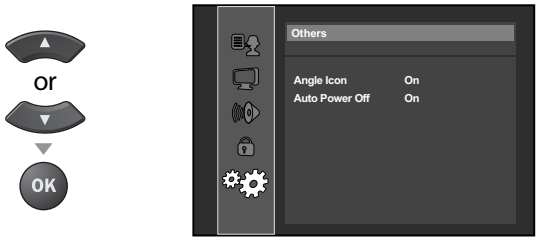
☑ Others

You can change the other functions.

3 Follow steps **1**-**2** on page 49, then use **[Cursor ▲/▼]** to select " ", then press **[OK]**.



4 Use **[Cursor ▲/▼]** to select " ", then press **[OK]**.

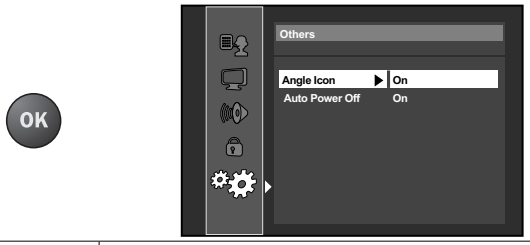


5 Use **[Cursor ▲/▼]** to select the desired item, then press **[OK]**.

Angle Icon

(Default: On)

You can set whether to display the angle icon or not during BD/DVD playback.



On	During BD/DVD playback, the angle icon will appear on the TV screen when the BD/DVD has the scene with various angles.
Off	The angle icon will be unshown even if the BD/DVD has the scene with various angles.

Auto Power Off

(Default: On)



On	This unit is automatically turned off and goes to the standby mode after 20 minutes of no use.
Off	Sets off the "Auto Power Off".

6 Press **[MENU / EXIT]** to exit.



☑ Reset to the Default Setting

You can reset all the settings except for the parental setting and on-screen menu language or clear the saved BD-ROM data.

3 Follow steps **1**-**2** on page 49, then use **[Cursor ▲/▼]** to select " ", then press **[OK]**.

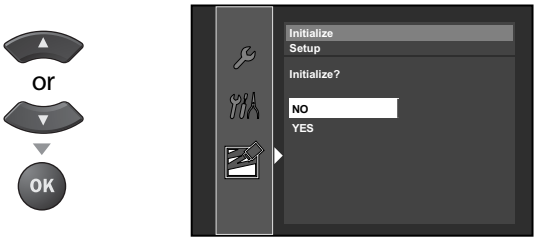


4 Use **[Cursor ▲/▼]** to select desired item, then press **[OK]**.



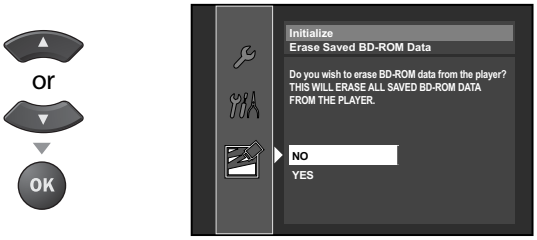
Setup (Default: No)

Select "Yes" to reset the setup menu to the default.



Erase Saved BD-ROM Data (Default: No)

Select "Yes" to erase all saved BD-ROM Data from the player



Note:

- *When you want to cancel the initialization, select "No" at step 4, then press **[OK]**.*

5 Press **[MENU / EXIT]** to exit.



☑ Language Code List

Language	Code
A-B	
Abkhazian	4748
Afar	4747
Afrikaans	4752
Albanian	6563
Amharic	4759
Arabic	4764
Armenian	5471
Assamese	4765
Aymara	4771
Azerbaijani	4772
Bashkir	4847
Basque	5167
Bengali;Bangla	4860
Bhutani	5072
Bihari	4854
Bislama	4855
Breton	4864
Bulgarian [BUL]	4853
Burmese	5971
Byelorussian	4851
C-E	
Cambodian	5759
Catalan	4947
Chinese [CHI]	7254
Corsican	4961
Croatian	5464
Czech [CZE]	4965
Danish [DAN]	5047
Dutch [DUT]	6058
English [ENG]	5160
Esperanto	5161
Estonian	5166
F-H	
Faroese	5261
Fiji	5256
Finnish [FIN]	5255
French [FRE]	5264
Frisian	5271
Galician	5358
Georgian	5747
German [GER]	5051
Greek [GRE]	5158
Greenlandic	5758
Guarani	5360
Gujarati	5367
Hausa	5447
Hebrew	5569
Hindi	5455
Hungarian [HUN]	5467
I-K	
Icelandic [ICE]	5565
Indonesian	5560
Interlingua	5547
Interlingue	5551
Inupiak	5557
Irish [IRI]	5347
Italian [ITA]	5566
Japanese [JPN]	5647
Javanese	5669
Kannada	5760
Kashmiri	5765
Kazakh	5757
Kinyarwanda	6469
Kirghiz	5771
Kirundi	6460
Korean [KOR]	5761
Kurdish	5767
L-N	
Laothian	5861
Latin	5847
Latvian;Lettish	5868
Lingala	5860
Lithuanian	5866
Macedonian	5957
Malagasy	5953
Malay	5965
Malayalam	5958
Maltese	5966
Maori	5955

Language	Code
Marathi	5964
Moldavian	5961
Mongolian	5960
Nauru	6047
Nepali	6051
Norwegian [NOR]	6061
O-R	
Occitan	6149
Oriya	6164
Oromo(Afan)	6159
Panjabi	6247
Pashto;Pushto	6265
Persian	5247
Polish [POL]	6258
Portuguese [POR]	6266
Quechua	6367
Rhaeto-Romance	6459
Romanian [RUM]	6461
Russian [RUS]	6467
S	
Samoan	6559
Sangho	6553
Sanskrit	6547
Scots Gaelic	5350
Serbian	6564
Serbo-Croatian	6554
Sesotho	6566
Setswana	6660
Shona	6560
Sindhi	6550
Singhalese	6555
Siswat	6565
Slovak [SLO]	6557
Slovenian	6558
Somali	6561
Spanish [SPA]	5165
Sundanese	6567
Swahili	6569
Swedish [SWE]	6568
T	
Tagalog	6658
Tajik	6653
Tamil	6647
Tatar	6666
Telugu	6651
Thai	6654
Tibetan	4861
Tigrinya	6655
Tonga	6661
Tsonga	6665
Turkish [TUR]	6664
Turkmen	6657
Twi	6669
U-Z	
Ukrainian	6757
Urdu	6764
Uzbek	6772
Vietnamese	6855
Volapuk	6861
Welsh	4971
Wolof	6961
Xhosa	7054
Yiddish	5655
Yoruba	7161
Zulu	7267

Note:

- *If you choose a language that has a 3-letter abbreviation, the code will be displayed every time you change the audio or subtitle language setting above. If you choose any other language, '---' will be displayed instead. (3-letter abbreviation is written in bracket.)*

☑ FAQ

Question	Answer
My remote control does not work. What should I do?	• Check the antenna or cable connection to the main unit. • Check the batteries of the remote control. • Check if there is an obstacle between the infrared sensor window and the remote control. • Test the signal output. If OK, then possible infrared sensor trouble. (Refer to "IR Signal Check" on page 58.) • Aim the remote control directly at the infrared sensor window on the front of the unit. • Reduce the distance to the unit. • Re-insert the batteries with their polarities (+/– signs) as indicated. • When there is an infrared-equipped device such as PC near this unit, it may interrupt the remote control signal of this unit. • Move the infrared-equipped device away from this unit, change the angle of the infrared sensor or turn off the infrared communication function.
How come the Initial setup appears every time I turn on this unit?	• Connect the RF coaxial cable to the unit directly and run the initial setup. • Make sure to complete the channel scan before turning off the unit.
Why I cannot watch some of TV programs.	• Make sure autoprogram has been completed. (Refer to "Autoprogram" on page 22.) • Autoprogram must be completed when you set up the unit for the first time or move it to a location where previously unavailable channels are broadcast. • The selected channel may not be broadcasting. • When autoprogram is interrupted and not completed, some channels will not be received. Make sure to complete. (Refer to "Autoprogram" on page 22.) • The selected channel cannot be viewed by the "Child Lock" setting. (Refer to "Child Lock" on page 30.) • The unit requires some kind of antenna input. An indoor antenna (VHF / UHF), an external antenna (VHF /UHF) or an RF coaxial cable from your wall cable/satellite box needs to be plugged into the unit.
How come there is no image from the connected external devices?	• Check if the right input mode is selected by pressing **[SOURCE]** or using **[CH + / –]**. (Refer to "Switching Each Input Mode" on page 19.) • Check the antenna or cable connection to the unit. • When using the Composite Video Connection check that the Green (Y), Blue (Pb/Cb) and Red (Pr/Cr) connectors are connected to their corresponding colored jacks on the unit.
Whenever I entered channel number, it changes automatically.	• Many digital channels have alternate channel numbers. The unit changes the numbers automatically to the ones signifying the broadcasting stations. These are the numbers used for analog broadcasts.
My disc cannot be played back. Is there any way I can play my disc?	• Clean the disc. • Ensure the disc is correctly inserted. • Check if the disc is defective by trying another disc. • Cancel the parental lock or change the control level. • Insert a correct disc that plays back on this unit. • Handle a disc with special care so that it does not have fingerprints, scratches or dusts on its surface.
Why are captions not displayed entirely? Or, captions are delayed behind the dialogue.	• Captions that are delayed a few seconds behind the actual dialogue are common for live broadcasts. Most captioning production companies can display a dialogue to maximum of 220 words per minute. If a dialogue exceeds that rate, selective editing is used to insure that the captions remain up-to date with the current TV screen dialogue.
How can I set the clock ?	• There is no clock function on this unit.

☑ Troubleshooting Guide

If the unit does not perform properly when operated as instructed in this manual,
check the following chart and all connections once before calling for service.

	Symptom	Remedy
TV	No power	• Make sure the AC power cord is plugged in. • Make sure that the AC outlet supplies the proper voltage, plug another electrical appliance into the AC outlet. • If a power failure occurs, unplug the AC power cord for 1 minute to allow the unit to reset itself.
	You cannot turn off the unit immediately.	• The unit may take about 1 minute to be shutting down when; - you turn off this unit right after you turned on this unit. - you turn off this unit right after you switch any input modes such as the DTV/TV channels, Video, Component or HDMI while a disc is playing back.
	Control button does not work.	• Press only one button at a time. Do NOT press more than one buttons at the same time.
	Power is ON but no screen image.	• Check whether the connection of the antenna, cable receiver or satellite box is connected correctly. • Check whether all the cables to the unit are connected to the correct output jack of your device like BD/DVD recorder. • Make sure that the selected input mode is connected to the working input jack. • Check if your computer is NOT in sleep mode when the input mode of this unit is in PC mode. Tap any key on the keyboard to wake up your computer.
	No picture or sound	• Check if the power is on. • Check if the right input mode is selected. • Check whether all the cables to the unit are connected to the correct output jack of your device like BD/DVD recorder. • View other TV channels. The problem might be limited to the broadcasting station. • Turn off the unit and wait for about 1 minute, then turn on the unit again. • Check whether the connection of the antenna, cable receiver or satellite box is connected correctly. • Make sure that the selected input mode is connected to the working input jack. • Check if your computer is NOT in sleep mode when the input mode of this unit is in PC mode. Tap any key on the keyboard to wake up your computer. • Make sure that the sound is not muted. Press **[MUTE]** so that the volume bar and current volume level will appear on the TV screen. • Make sure that the volume is NOT set to "0" or "Mute". If so, use **[VOL + / —]** to adjust the desired volume.
	No color	• View other TV channels. The problem might be limited to the broadcasting station. • Adjust "Color" in the main menu.
	Adjusted "PICTURE" or "SOUND" is not effective every time turn on the unit.	• You must set "Home" in "Location" (Refer to page 35). Otherwise, the settings you adjusted will not be memorized after you turn off the unit.
	Sound OK, picture poor	• Electrical interference from nearby appliances may affect picture quality. • Adjust "Contrast" and "Brightness" in the main menu. • View other TV channels. The problem might be limited to the broadcasting station. • For the best picture quality, watch "high definition" wide screen programs. If the HD content is not available, watch "standard definition" programs instead.
	Picture OK, sound poor	• View other TV channels. The problem might be limited to the broadcasting station. • Check if the audio cable is connected in correctly.
	You see a distorted picture or hear an unusual sound.	• You may be getting interference from electrical appliances, automobiles, motorcycles or fluorescent lights. • Try moving the unit to another location to see if this is the cause of the problem.
	Ghosts, lines or streaks in picture	• Electrical interference from nearby appliances may affect picture quality. • View other TV channels. The problem might be limited to the broadcasting station.
	You see "noise" or "trash" on the screen.	• When the capabilities of the unit exceed the capabilities of the digital broadcasting, the signal will be increased to match the capabilities of the display of the unit. This may cause noise or trash.
	Different color marks on the TV screen	• View other TV channels. The problem might be limited to the broadcasting station.

	Symptom	Remedy
TV	You switch to a different input and the volume.	• This unit will memorize the volume level from the last time you adjusted it. • If the volume of the sound from another device is higher or lower, then the loudness will change.
	You switch to a different input and the screen size changes.	• This unit will memorize the viewing mode from the last time you used the particular input modes.
	The display image does not cover the entire screen.	• If you are using the unit as a PC monitor, make sure that "Horizontal Position" and "Vertical Position" in "PC Settings" are set correctly. • If you are watching TV or using the Video, S-Video, Component Video or HDMI with 480i Input, press **[FORMAT]** repeatedly to switch various screen modes.
	Captions are displayed as a white box. No caption is displayed in the Closed Caption-supported program.	• Interference from buildings or weather conditions may cause captioning to be incomplete. • Broadcasting station may shorten the program to insert advertisement. The closed caption decoder cannot read the information of the shortened program.
	No caption is displayed when playing back a disc or a cassette tape containing captions.	• The disc or cassette tape may be illegally copied, or the caption signal might not have been read during copying.
	Black box is displayed on the TV screen.	• The text mode is selected for caption. Select "CC-1", "CC-2", "CC-3", "CC-4" or "Off".
BD/DVD	Completely distorted picture or black/white picture with BD/DVD.	• Make sure the disc is compatible with the unit.
	Picture freezes momentarily during playback.	• Check the disc for finger prints/scratches and clean with a soft cloth wiping from center to edge.
	Disc cannot be played.	• Clean the disc. • Ensure the disc is correctly inserted. • Check if the disc is defective by trying another disc. • Cancel the parental lock or change the control level. • Insert a correct disc that plays on this unit. • Handle a disc with special care so that it does not have fingerprints, scratches, or dusts on its surface.
	Buttons do not work or the unit stops responding.	• To completely reset the unit, unplug the AC power cord from the power outlet for 5-10 seconds.
	The unit does not respond to some operating commands during playback.	• Operations may not be permitted by the disc. Refer to the instructions of the disc.
	Angle does not switch.	• The angle cannot be switched for BD/DVD which do not contain multiple angles. In some cases multiple angles are only recorded for specific scenes.
	Playback does not start when the title is selected.	• Check the "Parental" setting.
	The password for rating level has been forgotten.	• Enter the default password (4737), then your forgotten password will be cleared.

Note:

- *To get the latest software information of this unit, please visit the following our website;* ***http:// www.magnavox.com/support/updates***
- *The LCD panel is manufactured to provide many years of useful life. Occasionally a few non active pixels may appear as a fixed point of blue, green or red. This is not to be considered a defect in the LCD screen.*
- *Some functions are not available in specific modes, but this is not a malfunction. Read the description in this manual for more details on correct operations.*
- *Some functions are prohibited on some discs.*

☑ Glossary

ATSC

Acronym that stands for Advanced Television Systems Committee and the name of the digital broadcasting standards.

Aspect Ratio

The width of a TV screen relative to its height. Conventional TVs are 4:3 (in other words, the TV screen is almost square); widescreen models are 16:9 (the TV screen is almost twice as wide as its height).

BD-Java

With some BD which support Java applications, you can enjoy the interactive functions such as games or interactive menus.

CEC (Consumer Electronics Control)

This allows you to operate the linked functions between our brand devices with CEC feature and this unit.

Component Video

This is a video signal format that conveys each of 3 principal colors of light (red, blue and green) through different signal lines. This allows the viewers to experience picture colors as original as it is. There are several signal formats, including Y / Pb / Pr and Y / Cb / Cr.

DTS (Digital Theater System)

DTS is a multi-channel surround sound system. By connecting to DTS decoder, you can enjoy movie dynamic and realistic sound like movie theater. DTS surround sound technologies were developed by DTS, Inc.

Dolby Digital

The system developed by Dolby Laboratories to compress digital sound. It offers stereo sound (2ch) or multi-channel audio.

HDMI (High-Definition Multimedia Interface)

Interface that supports all uncompressed, digital audio/video formats including set-top box, BD/DVD recorder or digital television, over a single cable.

HDTV (High Definition TV)

Ultimate digital format that produces high resolution and high picture quality.

NTSC

Acronym that stands for National Television Systems Committee and the name of the current analog broadcasting standards.

Off the air NTSC signals will no longer be sent by broadcasting stations during 2009.

Password / PIN Code

A stored 4-digit number that allows access to parental control features.

Region Code

Regions associate discs and players with particular areas of the world. This unit will only play back discs that have compatible region codes. You can find the region code of your unit by looking on the rear panel. Some discs are compatible with more than one region (or all regions).

SAP (Secondary Audio Program)

Second-audio channel delivered separately from main-audio channel. This audio channel is used as an alternate in bilingual broadcasting.

SDTV (Standard Definition TV)

Standard digital format that is similar to the NTSC picture quality.

S-Video

Offers higher quality images by delivering each signal, color (c) and luminance (y) independently of each other through a separate cable.

☑ Maintenance

Cabinet Cleaning

- Wipe the front panel and other exterior surfaces of the unit with a soft cloth immersed in lukewarm water and wrung dry.
- Never use a solvent or alcohol. Do not spray insecticide liquid near the unit. Such chemicals may cause damage and discoloration to the exposed surfaces.

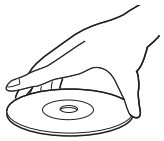
Panel Cleaning

Wipe the panel of the unit with a soft cloth. Before cleaning the panel, disconnect the AC power cord.

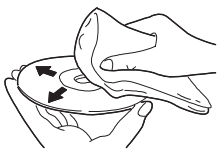
Disc Handling

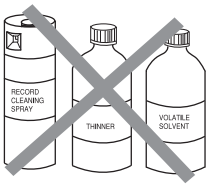
Handle the discs so that fingerprints and dust do not adhere to the surfaces of the discs.





- Always store the disc in its protective case when it is not used.
- To clean-off, use a soft cloth.
- Do not use a hard cloth since this will mar the disc.
- Wipe the disc in a straight line form center to edge.
- Never wipe with a circular motion.





- Do not use detergent or abrasive cleaning agents.

Servicing

Should your unit become inoperative, do not try to correct the problem yourself. There are no user serviceable parts inside. Turn off the unit, unplug the AC power cord and call our toll free customer support line found on the cover of this manual to locate an authorized service center.

If the Laser Optical Pickup Unit is Dirty

If the unit still does not perform properly when it is operated, while referring to the relevant sections and to "Troubleshooting Guide" in this owner's manual, the laser optical pickup unit may be dirty. Consult your dealer or an Authorized Service Center for inspection and cleaning of the laser optical pickup unit.

IR Signal Check

If the remote control is not working properly, you can use a digital camera (including a cellular phone with built-in camera) to see if it is sending out an infrared signal.



- With a digital camera (including built-in cell phone cameras): Point the Digital Camera towards the remote control infrared diode at the front of the remote control. Press any button on the remote control and look through the camera display. If the infrared pulsating light appears through the camera, the remote control is sending out an IR signal.

☑ Cable Channel Designations

If you subscribe to cable TV, the channels are displayed as 1-135. Cable companies often designate channels with letters or letter-number combinations. Please check with your local cable company. The following is a chart of common cable channel designations.

CATV channel	5A	2	3	4	5	6	7	8	9	10	11	12	13	A	B	C	D	E	F	G	H
TV Display	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
CATV channel	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	W+1	W+2	W+3	W+4	W+5	W+6
TV Display	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
CATV channel	W+7	W+8	W+9	W+10	W+11	W+12	W+13	W+14	W+15	W+16	W+17	W+18	W+19	W+20	W+21	W+22	W+23	W+24	W+25	W+26	W+27
TV Display	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
CATV channel	W+28	W+29	W+30	W+31	W+32	W+33	W+34	W+35	W+36	W+37	W+38	W+39	W+40	W+41	W+42	W+43	W+44	W+45	W+46	W+47	W+48
TV Display	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
CATV channel	W+49	W+50	W+51	W+52	W+53	W+54	W+55	W+56	W+57	W+58	A-5	A-4	A-3	A-2	A-1	W+59	W+60	W+61	W+62	W+63	W+64
TV Display	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
CATV channel	W+65	W+66	W+67	W+68	W+69	W+70	W+71	W+72	W+73	W+74	W+75	W+76	W+77	W+78	W+79	W+80	W+81	W+82	W+83	W+84	W+85
TV Display	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
CATV channel	W+86	W+87	W+88	W+89	W+90	W+91	W+92	W+93	W+94												
TV Display	127	128	129	130	131	132	133	134	135												

☑ General Specifications

TV

TV format: ATSC / NTSC-M TV standard

Closed caption system:
§15.122 / FCC (digital CC)
§15.119 / FCC (analog CC)

Channel coverage (ATSC / NTSC):

Terrestrial **VHF:** 2~13 **UHF:** 14~69

CATV 2~13, A~W,
W+1~W+94 (analog W+1~W+84),
A-5~A-1, 5A

Tuning system: Channel frequency synthesized tuning system

Channel access: Direct access keyboard,
Programmable scan, and up / down

BD/DVD

Discs (playback compatibility):
BD-video, BD-RE/-R,
DVD-video, DVD-RW/-R, DVD+RW/+R,
audio CD, CD-RW/-R

Frequency response:

BD / DVD (linear sound): 20 Hz to 20 kHz (sample rate: 48 kHz)
20 Hz to 44 kHz (sample rate: 96 kHz)

CD: 20 Hz to 20 kHz

Signal-to-noise ratio (S/N ratio):

CD: 85 dB (JEITA)

Total distortion factor:

BD / DVD / CD: 1 KHz 0.007% (JEITA)

☑ Electrical Specification

Sound Output: 10W, 8Ω x 2

☑ Other Specifications

Terminals:

Antenna Input:	VHF / UHF / CATV	75Ω unbalanced (F-type)
Audio Input:	RCA jack (L/R) x 8	500mV rms
Video Input:	RCA jack x 2	1V p-p (75Ω)
S-Video Input:	Mini DIN 4-pin jack x 2	**Y:** 1V p-p (75Ω) **C:** 286mV p-p (75Ω)
Component Video Input:	RCA jack x 3	**Y:** 1V p-p (75Ω) **Pb/Cb:** 700mV p-p (75Ω) **Pr/Cr:** 700mV p-p (75Ω)
HDMI input:	HDMI 19pin x 3	
USB input:	USB x 1	
Coaxial Digital Audio Output:	RCA jack x 1	500mV p-p (75Ω)
Audio Output:	RCA jack (L/R) x 2	500mV rms

Remote control: Digital encoded infrared light system

Operating temperature:
41°F (5°C) to 104°F (40°C)

Power requirements:
120V~ AC +/- 10%, 60Hz +/- 0.5%

Power consumption (maximum):
282W

LCD: 42 inches full HD panel

Dimensions:

	<without stand>		<with stand>	
W:	40.4 inches	(1,026.0mm)	40.4 inches	(1,026.0mm)
H:	26.2 inches	(664.5mm)	28.6 inches	(725.0mm)
D:	5.4 inches	(137.0mm)	12.3 inches	(310.0mm)

Weight: 58.5 lbs. (26.5kg) 63.8 lbs. (28.9kg)

- Designs and specifications are subject to change without notice and without our legal obligation.
- If there is a discrepancy between languages, the default language will be English.

LIMITED WARRANTY
NINETY (90) DAY LABOR / ONE (1) YEAR PARTS

WARRANTY COVERAGE:
This warranty obligation is limited to the terms as set forth below.

WHO IS COVERED:
This product warranty is issued to the original purchaser or the person receiving the product as a gift against defects in materials and workmanship as based on the date of original purchase ("Warranty Period") from an Authorized Dealer. The original sales receipt showing the product name and the purchase date from an authorized retailer is considered such proof.

WHAT IS COVERED:
This warranty covers new products if a defect in material or workmanship occurs and a valid claim is received within the Warranty Period. At its option, the company will either (1) repair the product at no charge, using new or refurbished replacement parts, or (2) exchange the product with a product that is new or which has been manufactured from new, or serviceable used parts and is at least functionally equivalent or most comparable to the original product in current inventory, or (3) refund the original purchase price of the product.
Replacement products or parts provided under this warranty are covered against defects in materials and workmanship from the date of the replacement or repair for ninety (90) days or for the remaining portion of the original product's warranty, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes company property. When a refund is given, your product becomes company property.

Note: Any product sold and identified as refurbished or renewed carries a ninety (90) day limited warranty.

Replacement product can only be sent if all warranty requirements are met. Failure to follow all requirements can result in delay.

WHAT IS NOT COVERED - EXCLUSIONS AND LIMITATIONS:
This Limited Warranty applies only to new company manufactured products that can be identified by the trademark, trade name, or logo affixed to it. This Limited Warranty does not apply to any hardware product or any software, even if packaged or sold with the product, as manufacturers, suppliers, or publishers may provide a separate warranty for their own products packaged with the bundled product.

The company is not liable for any damage to or loss of any programs, data, or other information stored on any media contained within the product, or other additional product or part not covered by this warranty. Recovery or reinstallation of programs, data or other information is not covered under this Limited Warranty.

This warranty does not apply (a) to damage caused by accident, abuse, misuse, neglect, misapplication, or non-supplied product, (b) to damage caused by service performed by anyone other than company approved Authorized Service Location, (c) to a product or a part that has been modified without written company permission, or (d) if any serial number has been removed or defaced, or (e) product, accessories or consumables sold "AS IS" without warranty of any kind by including refurbished product sold "AS IS" by some retailers.

This Limited Warranty does not cover:
- Shipping charges to return defective product.
- Labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna/signal source systems outside of the product.
- Product repair and/or part replacement because of improper installation or maintenance, connections to improper voltage supply, power line surge, lightning damage, retained images or screen markings resulting from viewing fixed stationary content for extended periods, product cosmetic appearance items due to normal wear and tear, unauthorized repair or other cause not within the control of the company.
- Damage or claims for products not being available for use, or for lost data or lost software.
- Damage from mishandled shipments or transit accidents when returning product.
- A product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- A product used for commercial or institutional purposes (including but not limited to rental purposes).
- Product lost in shipment and no signature verification receipt can be provided.
- Failure to operate per Owner's Manual.

TO OBTAIN ASSISTANCE...
Contact the Customer Care Center at:
1-866-341-3738

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY FOR THE CONSUMER, WITH THE ISSUING COMPANY NOT LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusions or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights. You may have other rights which vary from state/province to state/province.

FUNAI CORPORATION, Inc. 19900 Van Ness Avenue, Torrance, CA 90501

Printed in China